



**Northern Illinois
University**

**UNDERGRADUATE
CATALOG
2019-20**

Effective Fall Semester 2019

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
E-mail: healthservices@niu.edu

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



**Northern Illinois
University**

Undergraduate Catalog 2019-20

Effective Fall Semester 2019

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	Geology and Environmental Geosciences	307
A Guide to Reading This Catalog	7	History	314
An Introduction to NIU	10	Mathematical Sciences	322
Undergraduate Academic Programs	13	Center for Nonprofit and NGO Studies	329
Admission	17	Philosophy	332
Limited Admissions and Limited Retention Requirements	25	Physics	335
University Graduation Requirements	29	Political Science	340
General Education Requirements	49	Psychology	349
Other Graduation Requirements	66	Public Administration	354
Educator Licensure Requirements	68	Sociology	356
Academic Regulations	71	Statistics and Actuarial Science	362
Expenses	83	World Languages and Cultures	366
Financial Aid and Scholarships	85	College of Visual and Performing Arts	380
University Services	88	Art and Design	381
College of Business	94	Music	392
Accountancy	97	Theatre and Dance	403
Finance	101	Inter-College Interdisciplinary Certificates and Programs	411
Management	105	Inter-College and University-Wide Interdisciplinary Courses	413
Marketing	111	Other Academic Units	415
Operations Management and Information Systems	118	Center for Black Studies	415
College of Education	123	Center for Burma Studies	415
Counseling and Higher Education	125	Center for Latino and Latin American Studies	415
Curriculum and Instruction	127	Center for Southeast Asian Studies	415
Educational Technology, Research and Assessment	135	Regional History Center	416
Kinesiology and Physical Education	138	International Affairs	416
Leadership, Educational Psychology and Foundations	148	College of Law	418
Special and Early Education	151	Graduate School	418
College of Engineering and Engineering Technology	159	University Libraries	422
Electrical Engineering	162	University Press	423
Industrial and Systems Engineering	168	Illinois Articulation Initiative Core Curriculum	424
Mechanical Engineering	174	University Administration	426
Technology	180	Legal Notices	427
College of Health and Human Sciences	189	Index	431
Allied Health and Communicative Disorders	192		
Family and Consumer Sciences	194		
Health Studies	205		
Interdisciplinary Health Professions	214		
Military Science	218		
Nursing	221		
College of Liberal Arts and Sciences	226		
School of Public and Global Affairs	243		
Anthropology	244		
Biological Sciences	251		
Chemistry and Biochemistry	258		
Communication	264		
Computer Science	273		
Economics	277		
English	282		
Environmental Studies	291		
Geographic and Atmospheric Sciences	299		

Academic Year Calender

Fall Semester 2019

April-August

New student and family orientation sessions

August 19-23, Monday-Friday

Department, college, and university faculty meetings

August 26, Monday

Classes begin

August 31, Saturday

Last day to apply for Fall 2019 graduation via self-service in MyNIU

September 1, Sunday

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

September 2, Monday

Labor Day (university closed)

September 3, Tuesday

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

September 3, Tuesday

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

September 6, Friday

Last day for undergraduates to add a full-semester course with approval of course department

September 6, Friday

Last day for undergraduates to drop a full-semester course with approval of major college office

September 9, Monday

Last day for undergraduates to make up a mark of "I" (incomplete) from the Spring 2019 semester

September 13, Friday

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

September 13, Friday

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

September 20, Friday

Last day for undergraduates to withdraw from a first-half-semester course

October 18, Friday

Last day for undergraduates to withdraw from a full-semester course or from the university

October 20, Sunday

End of the first-half of the semester

October 21, Monday

Beginning of the second-half of the semester

October 27, Sunday

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

October 28, Monday

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

October 28, Monday

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

November 8, Friday

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

November 15, Friday

Last day for undergraduates to withdraw from a second-half-semester course

November 15, Friday

Last day for undergraduates enrolled only in second-half semester courses to withdraw from the university

November 27- December 1, Wednesday-Sunday

Thanksgiving break

December 2, Monday

Classes resume

December 2, Monday

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

December 7, Saturday

Classes end

December 9, Monday

Last day for undergraduates to make up a mark of "I" (incomplete) from the Summer 2019 session

December 9-14, Monday-Saturday

Final examinations

December 15, Sunday

End of fall semester
Undergraduate fall commencement

December 17, Tuesday

Final grades due by 12:00 noon

June 2019

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 2019

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 2019

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 2019

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 2019

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 2019

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 2020

October-January

New student and family orientation sessions

January 6-10, Monday-Friday

Department and college faculty meetings

January 13, Monday

Classes begin

January 19, Sunday

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

January 20, Monday

Martin Luther King, Jr. Birthday (university closed)

January 21, Tuesday

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

January 21, Tuesday

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

January 24, Friday

Last day for undergraduates to add a full-semester course with approval of course department

January 24, Friday

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

January 31, Friday

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

January 31, Friday

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

February 1, Saturday

Last day to apply for Spring 2020 graduation via self-service in MyNIU

February 7, Friday

Last day for undergraduates to withdraw from a first-half-semester course

March 6, Friday

Last day for undergraduates to withdraw from a full-semester course or from the university

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

April 10, Friday

Last day for undergraduates enrolled only in second-half-semester courses to withdraw from the university

April 13, Monday

Last day for undergraduates to make up a mark of "I" (incomplete) from the Fall 2019 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

End of spring semester
Undergraduate spring commencement

December 2019

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 2020

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 2020

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

March 2020

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 2020

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 2020

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 2020

June 15, Monday

Classes begin

June 15, Monday

Last day to apply for Summer 2020 graduation via self-service in MyNIU

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

June 26, Friday

Last day for undergraduates enrolled only in first-half-session courses to withdraw from the university

July 3, Friday

Independence Day observed (university closed)

July 4, Saturday

Independence Day (university closed)

July 10, Friday

Last day for undergraduates to withdraw from a full-session course

July 10, Friday

Last day for undergraduates enrolled only in full-session courses to withdraw

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 15, Wednesday

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 declare a major effective for the summer 2019 session

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

July 24, Friday

Last day for undergraduates enrolled only in second-half-session courses to withdraw from the university

August 9, Sunday

End of Summer session

August 10, Monday

Summer grades due by 4:30pm

A Guide to Reading This Catalog

Course Designators

ACCY–Accountancy	IDSP–Inter-College Interdisciplinary
AHCD–Allied Health and Communicative Disorders	IEET–Interdisciplinary Engineering and Engineering Technology
AHLS–Medical Laboratory Sciences	ILAS–Interdisciplinary Liberal Arts and Sciences
AHPT–Physical Therapy	INTL–International Programs
ANTH–Anthropology	ISYE–Industrial Engineering
ART–Art	IVPA–Interdisciplinary Visual and Performing Arts
ARTD–Art Design	JOUR–Journalism
ARTE–Art Education	KNDN–Physical Education Dance
ARTH–Art History	KNPE–Physical Education
ARTS–Art 2-D and 3-D Studio	LEBM–School Business Management
BADM–Business Administration	LEEA–Educational Administration
BIOS–Biological Sciences	LESM–Sport Management
BKST–Black Studies	LTIC–Bilingual/ESL
BME–Biomedical Engineering	LTLA–Language Arts
CAHA–Adult and Higher Education	LTRE–Reading
CAHC–Counseling	MATH–Mathematical Sciences
CAHE–Adult and Higher Education	MCTR–Mechatronics
CHEM–Chemistry	MEE–Mechanical Engineering
COMD–Communicative Disorders	MET–Meteorology
COMS–Communication Studies	MGMT–Management
CSCI–Computer Science	MILS–Military Science
ECON–Economics	MKTG–Marketing
ELE–Electrical Engineering	MLTL–Middle Level Teaching and Learning
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
FACS–Family and Consumer Sciences	NNGO–Nonprofit and NGO Studies
FINA–Finance	NURS–Nursing
FLAL–Applied Linguistics and General	NUTR–Nutrition, Dietetics, and Wellness
FLAR–Arabic	OELP–Office of Educator Licensure and Preparation
FLBU–Burmese	OMIS–Operations Management and Information Systems
FLCH–Chinese	PHHE–Public Health and Health Education
FLCL–Classical Languages	PHIL–Philosophy
FLFR–French	PHYS–Physics
FLGE–German	POLS–Political Science
FLIN–Indonesian	PSPA–Public Administration
FLIS–Foreign Language Independent Study	PSYC–Psychology
FLIT–Italian	REHB–Rehabilitation and Disability Services
FLJA–Japanese	SCL–Social Change Leadership
FLMT–Foreign Language Methods	SEEC–Early Childhood Education
FLPL–Polish	SESE–Special Education
FLPO–Portuguese	SEVI–Visual Impairments
FLPT–Foreign Language Student Teaching	SIHP–School of Interdisciplinary Health Professions
FLRU–Russian	SOCI–Sociology
FLSL–American Sign Language	SPGA–School of Public and Global Affairs
FLSP–Spanish	STAT–Statistics
FLST–Special Topics	TECH–Technology
FLTA–Tagalog	THEA–Theatre Arts
FLTH–Thai	TH-D–Dance Performance
FLTR–Foreign Language Translation	TLCI–Curriculum and Instruction
FSMD–Fashion Merchandising	TLEE–Elementary Education
GEOG–Geography	UBUS–Interdisciplinary Business
GEOL–Geology	UEDU–Interdisciplinary Education
HDFS–Human Development and Family Sciences	UEET–Interdisciplinary Engineering and Engineering Technology
HESA–Higher Education and Student Affairs	UHHS–Interdisciplinary Health and Human Sciences
HIST–History	UNIV–University-Wide Interdisciplinary
HLTH–Health Studies	WGSS–Women, Gender, and Sexuality Studies
HOSP–Hospitality	X–This letter following a course number indicates that the course
HSCI–Health Sciences	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 foundational studies requirement in the general education program. Passing a foundational studies examination fulfills the requirement for the foundational studies 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: An undergraduate student who is not currently seeking a degree.

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, which accredits degree-granting post-secondary educational institutions in the North Central region. NIU is included in the Doctoral Universities Higher Research Activity category of the Carnegie Foundation for the Advancement of Teaching and has achieved the Community Engagement Classifications for Outreach and Partnerships and for Curricular Engagement.

The university and its colleges have institutional membership or other affiliations in or with the American Association of State Colleges and Universities (AASCU), American Association of Colleges for Teacher Education, American Council on Education (ACE), Association of Governing Boards of Universities and Colleges (AGBUC), Association of Public and Land-Grant Universities (APLU), Council for Higher Education Accreditation (CHEA), Council of Graduate Schools, and Universities Research Association.

The university is also fully accredited by the Council for Accreditation of Educator 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. in athletic training is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).

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 and technology is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

In the College of Health and Human Sciences, the School of Allied Health and Communicative Disorders offers a D.P.T. program that is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). The Au.D. and M.A. with a specialization in speech-language pathology are accredited by

the Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology. The specialization in marriage and family therapy in the Master of Science program in applied human development and family sciences offered by the School of Family and Consumer Sciences is accredited by the Commission on Accreditation for Marriage and Family Therapy (COAMFTE). In the School of Family and Consumer Sciences, the Child Development and Family Center is accredited by National Association for the Education of Young Children (NAEYC) and the B.S. in human development and family sciences is approved by the National Council on Family Relations (NCFR). The undergraduate and graduate programs in nursing in the School of Nursing are accredited by the Commission on Collegiate Nursing Education (CCNE). The School of Health Studies offers the master of public health program that is accredited by the Council on Education for Public Health (CEPH), a B.S. in medical laboratory sciences that is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), and the graduate-level dietetic internship and the M.S. degree in nutrition and dietetics are accredited by the Accreditation Council for Education of Nutrition and Dietetics (ACEND); the undergraduate didactic program in nutrition, dietetics, and wellness is approved by ACEND. The School of Interdisciplinary Health Professions offers the M.S. in rehabilitation counseling that is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

In the College of Liberal Arts and Sciences, the B.S. in chemistry is approved by the American Chemical Society (ACS). 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 (APA). The school psychology M.A. program leading to specialist-level certification is fully approved by National Association of School Psychologists (NASP) and the Council for the Accreditation of Educator Preparation (CAEP). The B.S. degree with emphases in professional chemistry and biochemistry are certified by the American Chemical Society (ACS). 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 (NASPAA).

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 (NASAD), the National Association of Schools of Music (NASM), and the National Association of Schools of Theatre (NAST).

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

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 Barsema Alumni and Visitors Center (BAVC), hours are 8:00-4:30. The Office of Admissions desk at BAVC is open weekdays, 9:30-2:00. 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 10:00 a.m.-12:45 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

Educational Technology, Research and Assessment (B.S.)
Kinesiology and Physical Education (B.S.)
Special and Early Education (B.S.)

College of Engineering and Engineering Technology

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

College of Health and Human Sciences

Allied Health and Communicative Disorders (B.S.)
Communicative Disorders (B.S.)
Family and Consumer Sciences (B.S.)
Health Studies (B.S.)
Interdisciplinary Health Professions (B.S.)
Nursing (B.S.)

College of Liberal Arts and Sciences

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

Geology and Environmental Geosciences (B.S.)
History (B.A./B.S.)
Mathematical Sciences (B.S.)
Nonprofit and NGO Studies (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.)
World Languages and Cultures (B.A.)

College of Visual and Performing Arts

Art (B.A./B.S.)
Art History (B.A.)
Music (B.A.)
Theatre Arts (B.A.)

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

College of Visual and Performing Arts

Art Studio and Design
Dance Performance
Theatre Arts

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

College of Liberal Arts and Sciences

Bachelor of Music (B.M.)

College of Visual and Performing Arts

Music

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

College of Education

Curriculum and Instruction
Kinesiology and Physical Education
Special and Early Education

College of Health and Human Sciences

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.
Applied management—B.S.
Art—B.A. and B.S.
Art and design education—B.S.Ed.
Art history—B.A.
Art studio and design—B.F.A.
Athletic training—B.S.
Biological sciences—B.S.
Biomedical engineering—B.S.
Business administration—B.S.
Chemistry—B.S.
Communication studies—B.A. and B.S.
Communicative disorders—B.S.
Computer science—B.S.
Dance performance—B.F.A.

Early childhood education—B.S.
Economics—B.A. and B.S.
Electrical engineering—B.S.
Elementary education—B.S.Ed.
English—B.A. and B.S.
Environmental studies—B.A. and B.S.
Fashion merchandising—B.S.
Finance—B.S.
Geography—B.A. and B.S.
Geology and environmental geosciences—B.S.
Health sciences—B.S.
History—B.A. and B.S.
Hospitality and Tourism Management—B.S.
Human development and family sciences—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.
Mechatronics engineering—B.S.
Medical laboratory sciences—B.S.
Meteorology—B.S.
Middle Level Teaching and Learning—B.S.Ed.
Music—B.A. and B.M.
Nonprofit and NGO Studies—B.A. and B.S.
Nursing—B.S.
Nutrition, dietetics, and wellness—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.
Rehabilitation and Disability Services—B.S.
Sociology—B.A. and B.S.
Special education—B.S.Ed.
Sport management—B.S.
Technology—B.S.
Theatre arts—B.F.A.
Theatre studies—B.A.
World languages and cultures—B.A.

Honors Program

The University Honors Program (UHP) provides an enriched educational experience for students of high academic promise and achievement who have a commitment to excellence. The UHP 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; a unique blend of co-curricular programming; Honors-only research programs; specialized advising; a living-learning community; specialized internships; and Honors-only scholarships, tuition waivers, and awards.

University Honors Program 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. University Honors sections are normally available in all general education areas, as elective seminars, and in virtually all majors. Honors students culminate their experience with an in-depth Capstone Project, where students are encouraged to pursue a subject of their choosing and develop their interests through independent, yet guided, research, study, or artistry.

Graduation with UHP recognition frequently gives students a distinct advantage in applying for professional or graduate school

and for employment as they can articulate both their curricular and co-curricular accomplishments. In particular, the UHP has guaranteed admission agreements with several NIU graduate programs and the College of Law. The following is a current list of partners:

- Accelerated B.A. or B.S./J.D. Undergraduate Program and the College of Law*
- Accelerated B.S. or B.A./M.A. Program in Political Science
- Accelerated B.S./M.S. in Electrical Engineering
- Accelerated B.S./M.S. in Industrial and Systems Engineering
- Accelerated B.S./M.S. in Mechanical Engineering
- Global MBA
- M.A. Communicative Disorders Specialization in Speech-Language Pathology
- M.A. in Sociology
- Master of Accountancy (MAC)
- M.S.Ed. in Adult and Higher Education
- M.S.Ed. in Early Childhood Education
- M.S.Ed. in Educational Research and Evaluation
- M.S.Ed. in Kinesiology
- M.S.Ed. in Special Education
- M.S.Ed. in Sport Management
- M.S. or Ph.D. in Chemistry
- M.S. in Data Analytics
- M.S. in Industrial Management
- M.S. in Management Information Systems
- M.S. in Nutrition and Dietetics
- M.S. in Rehabilitation Counseling
- M.S. in Statistics

Please consult the specific catalog section of each program for additional details.

*Consistent with the American Bar Association requirements, for students to take advantage of this opportunity they must submit an application for review, successfully complete a minimum of $\frac{3}{4}$ of their undergraduate coursework, and earn a score on the LSAT at or above the 50th percentile of the previous year's matriculating law class.

All curricular UHP credit applies toward graduation requirements, which allows students to complete the UHP program with minimum burden. Students may also withdraw from the UHP program at any time without loss of credit.

Program of Study

The program is divided into two distinct options for students to complete – each with their own separate requirements. The *Associate University Honors* option requires six (6) points from a combination of curricular and co-curricular activities. Specifically, students who elect to pursue this distinction are required to earn a minimum of three (3) points through honors designated course work, with a minimum overall GPA of 3.30. (Each class must be greater than or equal to three-credits to earn one point towards *Associate University Honors* requirements.) Included within the minimum three (3) curricular points is a requirement of at least two (2) points of honors designated curricular credit outside the major. Furthermore, and included with the minimum three (3) curricular points, another requirement is one (1) University Honors Seminar. In addition, students must achieve Engage PLUS Silver Scholar status by completing and having approved a minimum of two (2) non-credit bearing, co-curricular learning experiences as defined by the Engage PLUS program. The remaining one (1) point is an elective that can be satisfied through either additional honors designated curricular course work or an added co-curricular experience that is approved through Engage PLUS.

The second option is *Full University Honors* and is achieved when students accumulate twelve (12) points from a combination of curricular and co-curricular activities. Students are required to earn a minimum of six (6) points through honors designated

course work with a minimum overall GPA of 3.30. (Each class must be greater than or equal to three-credits to earn one point towards *Full University Honors* requirements.) Included within the minimum six (6) curricular points is a requirement of at least four (4) points of honors designated curricular credit outside the major. Furthermore, and included with the minimum six (6) curricular points, other requirements include one (1) University Honors Seminar, and one (1) Honors Capstone independent study project completed during the senior year. In addition, students must achieve Engage PLUS Gold Scholar status by completing and having approved a minimum of four (4) non-credit bearing, co-curricular learning experiences as defined by the Engage PLUS program. The remaining two (2) points are electives that can be satisfied through either additional honors designated curricular coursework, added co-curricular experiences that are approved through Engage PLUS, or a combination of both. (Students may elect to begin the *Associate University Honors* option, successfully fulfill the requirements, and then continue in pursuit of *Full University Honors* – with all previous credit accrued counting towards the requirements of the latter.)

Within either option, students may earn honors credit in general education, elective, and major courses with a grade of A, A-, B+, B or B-.

Admission Requirements

The UHP welcomes not only freshmen but students who wish to enroll in the UHP 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 UHP is based on a minimum composite ACT score of 27 or SAT score of 1280 and a 3.75 GPA. Students whose record of achievement 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 may join the UHP if they have a cumulative GPA, from all higher educational institutions, of 3.30 or better (on a 4.00 scale).

Honors Transfer Credit

Those students who have previously completed honors courses may have these courses counted toward the completion of *Full University Honors*. For such credit to be applied the following conditions must be met:

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.

It is the student's responsibility to provide documentation of honors course work to the NIU UHP for evaluation and verification. Transfer credit is not accepted for co-curricular experiences students have completed in the past, nor may students apply curricular transfer credit towards the partial or complete fulfillment of *Associate University Honors* requirements. However, curricular credit does transfer towards this distinct portion of *Full University Honors* requirements.

Degrees with Distinction

Students who complete the requirements of *Associate University Honors* will have this designated on the official transcript.

Students who complete the requirements of *Full University Honors* will have this designated on the official transcript and diploma.

Additional Program Services

The UHP provides all of its students with special curricular and co-curricular programming.

All first-year and new transfer students are required to attend an 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 learn how to be successful at NIU.

Other services include priority registration for all courses, Honors Preferred Program (which provides discounts to students at local businesses), extended borrowing privileges for all library materials, dedicated regular and special advising and help in designing an academic program, a living-learning community in Honors House located in New Residence Hall Complex, externship programs, and a variety of extracurricular academic, professional development, community service, and social events. University Honors students also have opportunities to participate in special honors seminars on leadership, ethics, and microfinance; to study abroad in variety of locations; to participate in peer leadership positions; to be named as University Honors Scholars; 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 student learning outcomes is one of the ways the university measures the extent to which it fulfills its educational mission. Information gained from programmatic 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 help us gauge 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' knowledge and skills 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 Accreditation, Assessment, and Evaluation, assess@niu.edu, or visit us at go.niu.edu/assessment.

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 (computer science)
Department of Curriculum and Instruction (elementary education)
Department of Kinesiology and Physical Education (athletic training)
Department of Special and Early Education (early childhood education)
Department of Technology (applied manufacturing technology emphasis)

School of Allied Health and Communicative Disorders (degree completion emphasis in the major in health sciences)

School of Art and Design (art and design education; art studio and design; visual communication area of study)

School of Family and Consumer Sciences (human development and family sciences)

School of Health Studies (medical laboratory sciences)

School of Music (music)

School of Nursing (nursing)

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 2019.....	May 1, 2018
Summer 2019	September 1, 2018
Fall 2019	August 1, 2018

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 2019.....	December 1, 2018
Summer 2019.....	May 15, 2019
Fall 2019.....	August 1, 2019

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 2019.....	November 15, 2018
Summer 2019.....	May 1, 2019
Fall 2019.....	July 15, 2019

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 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 foundational studies requirements and some general education courses early in their programs of study.

Immunization Policy

All students enrolled in on-campus courses are required by the Illinois College Student Immunization Act (110-ILCS 20) and University policy, to be compliant with the following requirements:

- Three (3) vaccines that contain Tetanus/Diphtheria/Pertussis, one of which must be a Tdap vaccine. The last dose of vaccine must be within 10 years. Vaccines must be at appropriate intervals (#1 and #2 at least 28 days apart, #3 no less than 6 months after #2). Tetanus toxoid (TT or Tetanus) is not acceptable.

- Two (2) Measles, Mumps, Rubella (MMR) valid vaccines after the first birthday, at least 28 days apart. If students are unable to provide proof of MMR vaccines, serologic evidence (IGG antibody titers), a copy of lab report to prove positive immunity is acceptable.
- One (1) Meningococcal conjugate vaccine after the age of 16 for newly admitted students starting spring 2017 and under the age of 22. Meningitis or Meningococcal vaccinations are not acceptable.

Documentation of immunity must be complete and on file at the Immunization Compliance and Records Office before the following dates:

Fall term enrollment: August 1st
Spring term enrollment: January 1st
Summer term enrollment: June 1st

Failure to provide the required documentation by the 10th day of the semester will result in a late processing fee and registration hold. You will be notified at your NIU zID e-mail account if any documentation information is incomplete. Immunization information may be obtained from the Immunization Compliance and Records Office web page at www.niu.edu/health-services/services/immunizations.shtml 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 815-753-9585.

Admission Criteria

Freshmen

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

A formal application for admission.

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

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

Application fee.

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

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

Criteria for Admission

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

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

Applicants who rank in the upper half of their graduating class or who have a GPA of at least 2.75 on a 4.00 scale must have a composite ACT score of at least 19 or an SAT total score of 990. For SAT exams taken March 2016 or prior, a critical reading and mathematics SAT score of at least 910 is required.

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 an SAT total score of 1140. For SAT exams taken March 2016 or prior, a SAT critical reading and mathematics score of 1070 is required.

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 an SAT total score of 1140. For SAT exams taken March 2016 or prior, a minimum critical reading and mathematics SAT score of 1070 is required.

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 2019

Individuals who submit complete applications including all transcripts and test score information by November 1, 2018, 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, 2018.

Individuals who submit complete applications after November 1, 2018, and satisfy minimum admissions criteria are considered for admission on a competitive basis as long as space is available.

Summer Session 2019 and Fall Semester 2019

Individuals who submit complete applications including all transcripts and test score information by November 15, 2018, 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, 2019.

Individuals who submit complete applications after November 15, 2018, 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, 2019, who rank in the top 10 percent of their high school class and have:

An ACT composite score of at least 19 or

An SAT total score of 990 or

A critical reading and mathematics SAT score of at least 910 for SAT exams taken March 2016 or prior.

Priority consideration is also given to individuals whose application are complete by February 1, 2019, who rank in the upper third of their high school class and have:

- An ACT composite score of at least 21 or
- An SAT total score of 1070 or
- A critical reading and mathematics SAT score of at least 990 for SAT exams taken March 2016 or prior 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 foundational studies 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.

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

Out-of-State Public Community College Graduates

A graduate of a regionally-accredited, out-of-state, public community college who has not previously attended Northern Illinois University and who has completed a baccalaureate-oriented A.A. or A.S. degree and has met the following qualifications will meet NIU general education requirements and enter with junior standing.

An Associate in Arts (A.A.) or an Associate in Science (A.S.) degree baccalaureate-oriented program from a 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 out-of-state public community college graduate with an Associate in Applied Science, an Associate in General Studies, an Associate in Liberal Studies degree, or any other associate degree as noted 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 an out-of-state public community college should refer to "Readmission of Former NIU Students."

An applicant from an out-of-state 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 from the community college.

These benefits do not necessarily satisfy any additional course, GPA, or competitive admission requirements that may be needed for a specific college, major program, or graduation requirement at NIU.

Transfer Students from Illinois 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 2019

Individuals who submit complete applications including all official transcripts and required documents by November 1, 2018, 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, 2018.

Individuals who submit complete applications after November 1, 2017, and satisfy minimum admissions criteria are considered for admission on a competitive basis as long as space is available.

Summer Session 2019 and Fall Semester 2019

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, PTE Academic, 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, 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 for **priority** 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. College-level services such as course and university withdrawals will be provided by the academic college or Academic Advising Center identified on the application for admission.

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.

Reentrance of Out-of-State Public Community College Graduates

The same provisions as noted for the "Reentrance of Illinois Public Community College Graduates" will apply to out-of-state, public, community college graduates with a baccalaureate oriented Associate of Arts (A.A.) or Associate of Science (A.S.) degree.

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.

24 ADMISSION

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.

<i>Term</i>	<i>Application complete by</i>
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 education (B.S.Ed), educator licensure. Students must present an art education entrance portfolio consisting of studio work and appropriate art education materials to the art education faculty at the end of the semester in which they are enrolled in ARTE 200 and pass the portfolio review for admission into the licensure program. 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 of 2.50 GPA in all NIU courses to obtain entitlement for educator licensure in the state of Illinois.

Candidates who successfully complete the program and pass the state mandated Teacher Performance Assessment (TPA) will have completed all required ISBE and CAEP standards for receiving university recommendation for licensure. Successful completion of the program without receipt of a passing score on the state-mandated Teacher Performance Assessment (TPA) may result in the candidate receiving a degree without university recommendation for licensure.

Art Studio and Design Major (B.F.A.) (School of Art and Design)

A portfolio review is required for admission into the major in art studio and design (B.F.A.) after completion of designated courses in the chosen field of study. Check departmental information for any additional requirements.

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 during their freshmen year. 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 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 one preferably from a certified athletic trainer, from people who are familiar with and/or have supervised the applicant's professional work 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 1 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 quantitative literacy foundational studies courses (MATH 201 may not be used to fulfill this requirement)
- *ENGL 103 - Rhetoric and Composition I (3),
OR *ENGL 203 - Rhetoric and Composition II, Researched Writing in the Domains (3),
OR *ENGL 204 - Rhetoric and Composition, Accelerated Researched Writing in the Domains (3), if placed in ENGL 204
- *PSYC 102 - Introduction to Psychology (3)

* Available for general education credit.

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

- Sign the Contract of Understanding for Athletic Training (original signature)
- Obtain a 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 in the Department of Kinesiology and Physical Education 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, 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.

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 203, Rhetoric and Composition II, Researched Writing in the Domains (3),
OR *ENGL 204, Rhetoric and Composition, Accelerated Researched Writing in the Domains (3), if placed into ENGL 204,
OR pass the Writing Foundational Studies II Examination (0)
- *MATH 206, Introductory Discrete Mathematics (3), and *MATH 211, Calculus for Business and Social Science (4),
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. Applications for admission to the department must be filed at the computer science departmental office. Unless the student meets all requirements for admission into the major at the time they submit their application, responses will be sent after the completion of the current term.

Transfer students must seek departmental advisement at orientation or just prior to the beginning of their first semester on campus. For all students not yet admitted into the major, the department will advise them 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.

Health Sciences Degree Completion Emphasis (School of Interdisciplinary Health Professions)

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 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. Contact the College of Health and Human Sciences advising office or visit niu.edu/ora for the application.

Medical Laboratory Sciences Major (School of Health Studies)

The School of Health Studies 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 2.75 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 310, Introductory Organic and Biological Chemistry (3)
- CHEM 311, Introductory Organic and Biological Chemistry (1)
- *STAT 100, Basic Statistics (3)

* Available for general education credit.

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.

Nursing Major (School of Nursing)

The School of Nursing limits the total number of students admitted to the program depending on the resources available. This limitation applies to all applicants seeking admission to the nursing major. Nursing applicants who are not R.N.s must successfully achieve a reading comprehension score in compliance with the School of Nursing standards. (Students with an ACT reading test score of 24 or higher and 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, an SAT Evidence-based Reading and Writing score of 570 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 January 15. Current NIU students should submit all application materials to the nursing program by January 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 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 January 15. Applicants currently enrolled at NIU, but who have fewer than 24 semester hours, must have all application documents submitted by January 15 to the nursing program. Highly qualified freshmen applicants who complete the admission processes may be considered for 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 January 15 application deadline, current NIU students must submit an on-campus application. The applicant must satisfy the reading comprehension requirement. Priority will be given to students who have completed the following prerequisite courses by the January 15, 2020 deadline: BIOS 103 and BIOS 105, BIOS 357, CHEM 110 and CHEM 111 or CHEM 210 and CHEM 212, ENG 203 and STAT 208. For subsequent application deadlines, all the afore listed prerequisite courses must be completed. All prerequisites must be completed in order to start the program. 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 January 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. Priority will be given to students who have completed the following prerequisite courses by the January 15, 2020 deadline: BIOS 103 and BIOS 105, BIOS 357, CHEM 110 and CHEM 111 or CHEM 210 and CHEM 212, ENG 203 and STAT 208. For subsequent application deadlines, all the afore listed prerequisite courses must be completed. All prerequisites must be completed in order to start the program. 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 203, Rhetoric and Composition II, Researched Writing in the Domains (3),
OR *ENGL 204, Rhetoric and Composition, Accelerated Researched Writing in the Domains (3)
- *HDFS 280, Human Development, the Family, and Society (3),
OR *PSYC 225, Lifespan Development: Childhood through Adulthood (3)
- *NUTR 201, Human Nutrition (3)
- *PSYC 102, Introduction to Psychology (3)
- *STAT 100, Basic Statistics (3),
OR STAT 200, 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 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;
- provide evidence of meeting one of the following, within the past five years: employment as a registered nurse, graduation from an approved associate degree nursing program, or completion of an approved refresher course;
- GPA from a college or university consistent with the standards required by the NIU nursing program;

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.

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 and Design website or contact the School of Art and Design 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.

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.

Normal Time for Completion of Academic Program

Typically, the normal time to complete an NIU bachelor's degree is four years for full-time students who are continuously enrolled in an average of 15 credit hours each semester. For some majors, students will need to enroll in summer courses or more than 15 credit hours per semester to complete the degree in four years. Students are encouraged to work with their academic advisers to develop a completion plan.

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.

Writing-Infused Courses

Students entering NIU with 30 or fewer credit hours, excluding credits awarded through NIU's Credit by Examination Program, must earn credit in two upper-division courses that are designated as "writing-infused." These courses may be taken within the general education program, the major program, or through electives and are listed below. The class search in MyNIU can be searched to find writing-infused classes offered for a specific term by selecting the course attribute of "Writing-Infused."

Human Diversity Baccalaureate Requirement

All undergraduate students must complete the human diversity baccalaureate requirement either through a designated human diversity course, OR a non-course based experience that is designated as "human diversity." Human Diversity is defined as gender, ability, race/ethnicity, citizenship, wealth/material resources, religion, age, or sexual orientation, and includes an analysis of power and addresses people's differing access to resources/opportunities in the present or past. Students may meet this requirement by successfully completing any one of the following: an approved NIU Human Diversity course, an NIU course taken prior to that course being designated as a Human Diversity course, a course from an Illinois Articulation Initiative (IAI) participating institution that has an IAI "N" or "D" Human Diversity code, a transfer course that articulates to an NIU Human Diversity course, a transfer course that meets the transfer institution's Human Diversity requirement, or that is identified as a Diversity course by the transferring institution. Students may also satisfy NIU's Human Diversity requirement through a university-approved co-curricular experience. Here is the complete list of courses that fulfill this requirement.

Writing-Infused Course List

ACCY 375. ACCOUNTANCY WRITING LAB (1). Development of effective written communication skills appropriate for accounting professionals. Provides the accounting specific context to integrate technical accounting knowledge with the skills and abilities needed to communicate that knowledge in written form within a professional accounting environment. Must be taken concurrently with ACCY 320 or ACCY 360. PRQ: ACCY 310 with a grade of C or better; COMS 100; ENGL 104 or ENGL 105. CRQ: UBUS 311.

ACCY 470. ACCOUNTANCY ADVANCED WRITING LAB (1). Continuation of ACCY 375. Use of critical thinking skills to develop effective written communication appropriate for communicating technical topics in accounting. Explores a variety of situations that accounting professionals experience in their careers and discusses the necessary communication skills. PRQ: ACCY 370 and ACCY 375.

AHLS 446. PRINCIPLES OF LABORATORY MANAGEMENT AND PRACTICE (1). Expansion of skills of the clinical laboratorian who is an expert in the technical and professional operations of the laboratory to include expertise necessary for administrative and management roles for the laboratory. Didactic and practical experiences both in the classroom and via off-campus activities.

ANTH 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.

ANTH 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.

*ANTH 409. CULTURES AND SOCIETIES OF THE MIDDLE EAST (3). Studies the peoples and societies of the Middle East and North Africa from an anthropological perspective. Explores problems of crosscultural examination and the role of anthropology in the formation of the idea of the "Middle East" as an area of study. Examines and problematizes key themes commonly linked with the region, such as tribe and state, family and kinship, gender and sexuality, honor and shame, tradition and modernity, and religion and secularism. Includes ethnographies based on field work in the region, contemporary news reports, and films.

ANTH 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.

ANTH 425. ENVIRONMENT AND ANTHROPOLOGY (3). *Crosslisted as ENV 425X*. 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.

ANTH 429X. INTERNATIONAL NGOS AND GLOBALIZATION (3). *Crosslisted as NGO 429 and SOC 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.

ANTH 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.

ANTH 444. PRIMATE ECOLOGY AND CONSERVATION (3). *Crosslisted as ENV 444X*. 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.

ANTH 454. 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.

ANTH 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.

ARTE 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; ART 100 and ART 101 and ART 102 and ART 103 and ARTH 291 and ARTH 292; and minimum 2.75 cumulative GPA and admission to educator licensure, or consent of school.

ARTE 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.

ARTE 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.

ARTE 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.

ARTE 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.

*ARTH 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.

* Available for general education credit.

* Fulfills the Human Diversity Requirement.

***ARTH 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.

***ARTH 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.

***ARTH 331. ART, NATURE AND TECHNOLOGY 1400 TO 1800 (3).**

Examination of mathematical and scientific principles used by artist-scientists to create art and architecture from 1400 to 1800. Exploration of the ancient roots of these principles and their continuing currency in artist-scientists' achievements today.

***ARTH 340. STUDIES IN MODERN ART (3).**

A. 19th Century Art

B. 20th Century Modernism

C. Thematic Subjects

History, theory, and criticism of various aspects of 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.

***ARTH 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.

***ARTH 360. STUDIES IN DESIGN (3).**

A. Modern and Postmodern Architecture

B. From Print Culture to New Media

C. From Craft to Industry

D. 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.

***ARTH 361. HISTORY OF SUSTAINABLE DESIGN (3)** History, theory, and criticism of sustainable design from the 18th century to the present.

***ARTH 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.

***ARTH 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.

ARTH 451. TOPICS IN 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.

ARTH 452. TOPICS IN 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.

ARTH 453. TOPICS IN 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.

ARTH 454. TOPICS IN MODERN AND AMERICAN ART (3). Various topics, such as Global Moderns, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 455. TOPICS IN CONTEMPORARY ART (3). Various topics, such as Photography as Art and Art as Photography, Globalization and Contemporary Art, Identity in Contemporary Art, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 456. TOPICS IN 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.

ARTH 457. TOPICS IN ASIAN ART (3). Specialized topics selected for in-depth study of media, imagery, artistic traditions or genres in Asian art will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 458. TOPICS IN 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.

ARTH 485. TOPICS IN ART HISTORY (3). Topics announced. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 486. ART HISTORICAL METHODOLOGY (3). Studies of various methodological approaches and tools employed in the discipline of art history. PRQ: 6 semester hours of art history survey or equivalent, or consent of school.

ARTH 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.

BME 495. SENIOR BIOMEDICAL ENGINEERING DESIGN I (3). Complete preparation of an engineering system design or project covering problem identification, conceptual design and analysis, prototyping, and the development of a work schedule required to carry out the project. Includes methodology, standards and safety codes, professional ethics, decision making, design evaluations, and oral and written communication. A writing-intensive course. Offered in the fall. Students are expected to take BME 496 the following spring. PRQ: BME 395 and consent of department.

BME 496. SENIOR BIOMEDICAL ENGINEERING DESIGN II (3). Execution of capstone design project under direct supervision of the instructor or other subject-matter expert. Students further refine and complete design solution to the engineering design problem proposed during BME 495 Senior Biomedical Engineering Design I. Students further refine and incorporate engineering design concepts, including safety and cost effectiveness, as well as employ analytical and computer tools. Team project required. A writing-infused course. The course is offered in the spring. Students are required to take BME 495 the previous fall. PRQ: BME 495.

CHEM 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.

CHEM 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.

COMD 429. ASSESSMENT PROCEDURES IN COMMUNICATIVE DISORDERS (3). Fundamental concepts underlying the evaluation of communicative disorders. PRQ: COMD 220 and STAT 100 or STAT 200. CRQ: Junior status.

COMD 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.

COMS 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.

COMS 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.

COMS 401. CRITICISM OF PUBLIC RHETORIC (3). Consideration of specific methods of rhetorical analysis and evaluation of public rhetoric representative of contemporary thought.

COMS 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.

COMS 466. NARRATIVE SCRIPTWRITING (3). Focus on structure, development, and execution of a narrative fiction script for media. Creativity, critical ability, and discipline in writing stressed. PRQ: COMS 355.

ECON 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: Must have completed all other non-elective economics courses for the economics major.

ELE 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.

ELE 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.

ELE 495. SENIOR ELECTRICAL ENGINEERING DESIGN I (3). Complete preparation of an engineering system design or project covering problem identification, conceptual design and analysis, prototyping and the development of a work schedule required to carry out the project. Includes methodology, standards and safety codes, professional ethics, decision making, design evaluations, and oral and written communication. A writing-intensive course. Offered in the fall. Students are expected to take ELE 496 the following spring. PRQ: ELE 395 and consent of department.

ELE 496. SENIOR ELECTRICAL ENGINEERING DESIGN II (3). Execution of capstone design project under direct supervision of the instructor or other subject-matter expert. Further refinement and completion of design solution to the engineering design problem proposed during ELE 495, Senior Electrical Engineering Design I. Further refinement and incorporation of engineering design concepts, including safety and cost effectiveness, as well as employ analytical and computer tools. Team project required. A writing-infused course. Offered in the spring. Students are expected to take ELE 495 the previous fall. PRQ: ELE 495.

ENGL 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.

ENGL 301. WRITING POETRY I (3). Beginning course in writing poetry.

ENGL 302. WRITING FICTION I (3). Beginning course in writing fiction.

ENGL 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.

ENGL 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.

***ENGL 310. IDEAS AND IDEALS IN WORLD LITERATURE (3).** Translations of epics, religious writings, treatises on love, myths, novels, essays, and plays--ancient to modern, Eastern and Western. How to define what the "classics" are and explore why these works endure. Survey with selected authors.

ENGL 311. TRANSFORMATIVE POETRY (3). How poetic forms and language persuade readers to see the world in new and unconventional ways, and what makes poems powerful in different cultures and times. Survey with selected poets.)

***ENGL 315. READINGS IN SHAKESPEARE (3).** Plays and poetry that continue to engage modern audiences with exploration of perennial themes and vivid representations of human experience and conflicts. Credit available for general education and educator licensure candidates in English Language Arts in middle school.

*ENGL 318. EXPLORING HUMAN LANGUAGE (3). Introduction to principles of linguistic analysis. Additional topics may include biological foundations of language, linguistic variation and change, language acquisition, and classification of world languages.

ENGL 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.

ENGL 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.

ENGL 331. AMERICAN LITERATURE: 1830-1860 (3). Literature of the American Romantic period, including such writers as Emerson, Hawthorne, Poe, Fuller, Stowe, Thoreau, and Melville.

ENGL 332. AMERICAN LITERATURE: 1860-1910 (3). Includes such writers as Dickinson, Twain, James, Chopin, Chesnutt, and Wharton.

ENGL 333. AMERICAN LITERATURE: 1910-1960 (3). Includes such writers as Cather, Stevens, Eliot, Fitzgerald, Faulkner, Hurston, and Williams.

ENGL 334. AMERICAN LITERATURE: 1960-PRESENT (3). Includes such writers as Bellow, Rich, Morrison, Pynchon, Ashbery, and Kushner.

*ENGL 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.

ENGL 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.

*ENGL 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.

ENGL 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.

ENGL 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.

ENGL 375. THE AMERICAN NOVEL (3). Development of the American novel from the 18th century to the present.

ENGL 376. AMERICAN DRAMA SINCE 1900 (3). Selected works by representative American playwrights since 1900.

ENGL 377. AMERICAN POETRY SINCE 1900 (3). Selected works by representative American poets since 1900.

*ENGL 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.

*ENGL 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.

ENGL 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.

ENGL 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.

ENGL 401. WRITING POETRY II (3). Advanced course in writing poetry. PRQ: ENGL 301.

ENGL 402. WRITING FICTION II (3). Advanced course in writing fiction. PRQ: ENGL 302.

ENGL 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.

ENGL 404. THEORY AND RESEARCH IN WRITTEN COMPOSITION (3).

A. English Language Arts. 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.

B. Middle Level Content Areas. Theory and research applied to principled practices in teaching and evaluating composition in middle school content areas other than English Language Arts, with emphasis on meeting Common Core Standards for writing in the multicultural classroom. Aligned with the Illinois Professional Teaching Standards.

ENGL 405. EARLY ENGLISH LITERATURE (3). English literature to 1500. Modernized texts used for works which might otherwise present language problems.

ENGL 406. CHAUCER (3). The poetry, with emphasis on *The Canterbury Tales*.

ENGL 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.

ENGL 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.

ENGL 409. MILTON (3). Poetry and prose, with emphasis on *Paradise Lost*.

ENGL 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.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

ENGL 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.

ENGL 414. THE VICTORIAN AGE (3). Later 19th-century English literature, including such writers as the Brownings, Tennyson, the Brontës, Dickens, Eliot, Arnold, and Pater.

ENGL 420. ARTHURIAN LITERATURE (3). Representative medieval works, in both Middle English and translation from European languages, with consideration of their influence on later Arthuriana.

ENGL 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.

ENGL 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.

ENGL 471. THE ENGLISH NOVEL SINCE 1900 (3). Includes works by such representative authors as Conrad, Joyce, Woolf, Lawrence, Murdoch, Amis, Naipaul, and Drabble.

ENGL 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.

ENGL 475. BRITISH POETRY SINCE 1900 (3). Includes works by such representative authors as Hopkins, Yeats, Sitwell, Eliot, Smith, Thomas, and Heaney.

ENGL 476. BRITISH DRAMA SINCE 1900 (3). Includes works by such representative playwrights as Wilde, Shaw, Beckett, Osborne, Pinter, Stoppard, and Churchill.

ENGL 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.

ENGL 480. MATERIALS AND METHODS OF TEACHING ENGLISH LANGUAGE ARTS (3).

A. At the Secondary Level. 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, especially for learners at the high level (9-12). 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.

B. At the Middle Level. Methods, curriculum materials, and technologies essential to the teacher of English 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 instructional activities and multiple representations of concepts to accommodate diverse students' characteristics and abilities, especially for learners at the middle school level (grades 5-8). 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.

ENGL 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.

ENGL 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.

ENGL 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.

ENVS 425X. ENVIRONMENT AND ANTHROPOLOGY (3). *Crosslisted as ANTH 425*. 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.

ENVS 444X. PRIMATE ECOLOGY AND CONSERVATION (3). *Crosslisted as ANTH 444*. 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.

**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 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.

*EPFE 400. FOUNDATIONS OF EDUCATION (3). Sociological, philosophical, and historical foundations of education. Curriculum development, multicultural concerns, and school organization are addressed in relation to teaching.

*EPFE 410. PHILOSOPHY OF EDUCATION (3). Differentiates philosophy of education from other basic inquiry into education. Emphasis on standard forms of philosophical reasoning. Exploration of leading writings for their relevance to the improvement of instruction in a sociocultural context.

*EPS 430. BECOMING ADULT IN POSTMODERN CONTEXTS (3). A cross-disciplinary approach to explore the meaning(s) of adulthood and the reasons for the delay in the transition to adulthood in contemporary society utilizing psychological, sociological, historical, and anthropological approaches. Focus on identity theories, postmodern critiques of identity, and contested definitions of adulthood. Reflection on identity development and growth toward adulthood is encouraged. PRQ: PSYC 102.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

FINA 395. CAREER PLANNING IN FINANCE (3). Efficient job search techniques to help identify appropriate career opportunities. Preparation of resume, cover letters, business etiquette, business ethics, and mock interviews. Review and development of business writing techniques. CRQ: FINA 320 with a grade of at least C; and finance major.

FINA 485. CASES IN FINANCIAL DECISION MAKING (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, and ACCY 306 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, or consent of department.

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.

FLBU 482. CENSORSHIP, PROPAGANDA, AND MEDIA BIAS IN SOUTHEAST ASIA AND BEYOND (3). Addresses the question What is the general media landscape like in Southeast Asia? Issues relevant to freedom of expression and cultural production of dissent are addressed. Topics include literature, cartoons, slogans, authoritarian regimes, and social media. Hands-on learning opportunities provide experience in creating digital narratives and interactive contents.

FLFR 301. BREAKING IT DOWN: THE STRUCTURE OF FRENCH (3). Exploration of core areas of French grammar and associated linguistic concepts. PRQ: FLFR 202.

FLFR 302. INTRODUCTION TO TRANSLATION (3). Exploration of the vast field of translation studies and its practical applications. Students will enhance their understanding of French grammar and culture by translating from a wide range of genres, including literature, journalism, marketing as well as more popular cultural forms. PRQ: FLFR 202.

FLFR 321. CULTURAL PRACTICES IN FRANCE (3). Survey of cultural practices in France, with a focus on literary, artistic, cinematic and popular works of historical importance. PRQ: FLFR 202 or consent of department.

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

FLFR 400. SPECIAL TOPICS IN FRENCH LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

FLFR 411. COMMUNICATING IN MODERN FRENCH (3). Advanced conversation and composition course focusing on the comprehension and usage of contemporary French in day-to-day communication, including formal and informal language, world varieties of French, and French slang. PRQ: Two 300-level French courses or consent of department.

FLFR 412. FRENCH FOR BUSINESS (3). Study of select business and administrative aspects of French, such as writing a resume and cover letter, answering interview questions, and composing professional communications. PRQ: Two 300-level French courses or consent of department.

FLFR 437. AUTHORS 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: Two 300-level French courses or consent of department.

FLFR 440. POSTCOLONIAL STUDIES AND FRANCOPHONE CULTURE (3). General treatment of the works of Francophone writers from one of the following regions: French Caribbean, the Maghreb, or French-speaking Americas. PRQ: Two 300-level French courses or consent of department.

FLFR 445. FEMINISM IN FRANCE (3). Study of the role of women in French society from the medieval period to the present through the lens of various feminist movements. PRQ: Two 300-level French courses or consent of department.

FLFR 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.

FLFR 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.

FLFR 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.

FLFR 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.

FLFR 481. ADVANCED FRENCH PHONETICS AND PHONOLOGY (3). Detailed exploration of the sound system of French, including what sounds make up the French language, how to transcribe French words using the International Phonetic Alphabet, and understanding the rules that govern pronunciation. PRQ: Two 300-level French courses or consent of department.

FLFR 482. HISTORY OF THE FRENCH LANGUAGE (3). Internal development of the French language from its origins to the present with considerations of external social influences. Attention given to the relationship of French to the other Romance languages through elements of phonology, morphology, syntax, and vocabulary. PRQ: FLFR 301 or FLFR 302 or FLFR 311; or consent of department.

FLFR 483. TRANSLATION THEORY AND PRACTICE (3). Analysis of translation as a linguistic practice and a metaphor for cultural exchange. PRQ: Two 300-level French courses or consent of department.

FLFR 484. ADVANCED TRANSLATION (3). Intensive training in accurate translation of business, administrative, and technical texts. PRQ: FLFR 302 or consent of department.

FLGE 302. READING, WRITING, TRANSLATING (3). Enhancing students' understanding of German through exposure to a variety of media with emphasis on translation from German to English and English to German. PRQ: FLGE 202.

FLGE 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 while focusing on the contemporary context. PRQ: FLGE 202.

FLGE 321. GERMAN CULTURAL AND LITERARY TOPICS THROUGH THE CENTURIES (3). Survey of cultural practices in Germany with a focus on literary, artistic, cinematic, and popular works of historical importance. PRQ: FLGE 202 or consent of department.

FLGE 322. CULTURAL AND LITERARY TOPICS IN GERMAN-SPEAKING COUNTRIES (3). Survey of cultural practices in German-speaking countries with a focus on literary, artistic, cinematic, and popular works of historical importance. PRQ: FLGE 202 or consent of department.

FLGE 412. PRACTICAL BUSINESS GERMAN (3). German language study oriented toward business practices. Techniques of spoken and written communication necessary in the German work environment. Extensive practice in the writing of business correspondence and formal presentations. PRQ: Two 300-level German courses or consent of department.

FLGE 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.

FLGE 461. GERMAN CULTURAL STUDIES: READING TEXTS IN CONTEXTS (3). Focus on the central role that culture plays in fostering and understanding German society through a variety of media such as fiction, film, magazines, blogs, and music. PRQ: Two 300-level German courses or consent of department.

FLGE 463. *DEUTSCHLAND HEUTE* (3). Critical approach to postwar and contemporary German culture, society, and everyday life with emphasis on the developments since the reunification of 1990 using German media in print and screen. PRQ: Two 300-level German courses or consent of department.

FLGE 481. BREAKING IT DOWN: THE STRUCTURE OF MODERN GERMAN (3). Examination of core areas of German linguistic concepts and the use of contemporary linguistic methods to analyze and contrast major structures and their functions. PRQ: Two 300-level German courses or consent of department.

FLGE 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.

FLGE 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.

FLGE 485. HISTORY OF THE GERMAN LANGUAGE (3). Survey of the German language from its origins to the present with a consideration of the political, social, and literary forces influencing the language. Topics include grammar and phonology, and the relationship of German to other languages and to older Germanic dialects. PRQ: Two 300-level German courses or consent of department.

FLJA 321. INTRODUCTION TO JAPANESE LITERATURE (3). Introduction to literary analysis of Japanese modern literature in translation. Covers major authors of the 19th and 20th centuries. Taught in English.

FLJA 361. INTRODUCTION TO JAPANESE CULTURE (3). Comprehensive introduction to Japanese culture and ideology, from ancient to modern times. Taught in English.

FLRU 400. SPECIAL TOPICS IN RUSSIAN LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

FLSP 302. ADVANCED COMPOSITION IN SPANISH (3). PRQ: FLSP 301.

FLSP 320. TEXTUAL AND MEDIA ANALYSIS (3). Introduction to the principles of literary analysis and critical writing, reading skills, and vocabulary building, through selected readings in Spanish and Latin American literature in prose narrative, poetry, and drama. PRQ: FLSP 202 or FLSP 215.

FLSP 321. INTRODUCTION TO SPANISH LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLSP 320.

FLSP 322. INTRODUCTION TO SPANISH-AMERICAN LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLSP 320.

FLSP 361. SPAIN TODAY (3). Overview of contemporary Spanish culture and its roots 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.

FLSP 362. LATIN AMERICA TODAY (3). Overview of contemporary Latin-American culture and its roots 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.

FLSP 431. SPANISH GOLDEN AGE POETRY (3). Study and analysis of the major poetic works of the Spanish 16th and 17th centuries. Includes Spanish Petrarchists of the Renaissance, Mannerist, and Baroque periods, including some of the greatest poets of all Spanish literature. PRQ: FLSP 321 or FLSP 322.

FLSP 432. MEDIEVAL SPANISH LITERATURE (3). Through the 15th century. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 433. CLASSICAL SPANISH DRAMA (3). PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 434. CERVANTES: THE QUIXOTE (3). PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 435. SPANISH GOLDEN AGE PROSE (3). Study and analysis of the prose of the Spanish Golden Age, including the chivalric, picaresque, and mystic genres. Includes the works of Miguel de Cervantes (with the exception of *Don Quixote*). PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 436. SPANISH ROMANTICISM AND REALISM (3). PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 437. THE GENERATION OF 1898/*FIN DE SIGLO* (3). PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 438. CONTEMPORARY SPANISH LITERATURE (3). PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 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.

FLSP 440. SPANISH AMERICAN POETRY AND THEATER (3). Critical study of poetry and theater as literary genres; in-depth study of representative works which may date from the period of European contact to the present day. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 441. SPANISH AMERICAN NOVEL (3). Critical study of the novel as genre, accompanied by an in-depth study of representative works by Spanish American writers of the 19th, 20th, and 21st centuries. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 445. LATIN AMERICAN WOMEN WRITERS (3). General study of the works of Latin American women writers and the evolution of feminist thought in Latin America. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 452. LITERATURE OF THE CARIBBEAN (3). General treatment of the literature of Colombia, Venezuela, Central America, and the Spanish-speaking West Indies with emphasis on the 19th and 20th centuries. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 454. MEXICAN LITERATURE, CULTURE AND FILM (3). Explore Mexico's literary traditions and cultures through fiction, non-fiction, dramatic works, and film. Selected readings with emphasis on the 20th century. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 455. SPANISH-AMERICAN SHORT STORY (3). General treatment of this genre in the various Spanish-American countries including different authors, with emphasis on the 20th century. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 456. COLONIAL LATIN AMERICAN LITERATURE (3). General treatment of literature of Spanish America during the colonial period (before 1900), including pre-Columbian literature. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 457. 19TH CENTURY SPANISH AMERICAN LITERATURE (3). Adaptation and development of periods such as romanticism, realism, and naturalism in the Spanish American cultural context, involving issues such as the politics of national identity and the effect of language and history. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 458. SPANISH AMERICAN MODERNISMO AND VANGUARDIAS: 1880-1945 (3). Overview of Latin American poetry and prose from 1880 to 1945, focusing on issues such as the influence of modernity, the politics of literary expression, and the artistic movements in Europe that led Spanish American writers to define their role in a globalized world. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 459. SPANISH AMERICAN HISTORICAL NOVELS (3). Study of historical novels depicting such important events from the history of Spanish America as the discovery and conquest, the wars of independence, and other important historical events or time periods. Issues of verisimilitude, historical and historiographical criticism, and the concept of history. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 460. CONTEMPORARY SPANISH AMERICAN LITERATURE (3). Spanish American prose, poetry, and theater from 1945 to the present. PRQ: FLSP 321 or FLSP 322, or consent of department.

FLSP 461. SEMINAR ON THE CULTURES OF SPAIN (3). Analysis of a series of documents (literary texts, film, advertisements, newspapers, and magazines among others) in order to understand the basis of the construction of Spain's historical, political, and cultural identity. PRQ: FLSP 320 or FLSP 361 or FLSP 362, or consent of department.

*FLSP 462. SEMINAR ON THE CULTURES OF LATIN AMERICA (3). Analysis of scholarly texts, interpretive essays, other primary sources, and a variety of cultural artifacts (such as films, music, art objects, literary texts) in order to explore Latin America's cultural heritage. PRQ: FLSP 320 or FLSP 361 or FLSP 362, or consent of department.

FLSP 463. HISPANIC CULTURE THROUGH FILM (3). Introduction to contemporary Hispanic culture through the study of film. Taught in Spanish. PRQ: FLSP 320 or FLSP 361 or FLSP 362, or consent of department.

FLSP 482. FOUNDATIONS IN SPANISH SOCIOLINGUISTICS (3). Introduction to basic principles of Spanish sociolinguistics. Provides necessary background for advanced studies in Spanish sociolinguistics. PRQ: FLSP 480 or consent of department.

FLSP 483. TECHNIQUES OF TRANSLATION (3). Development of skill and techniques of translation from Spanish to English and English to Spanish. PRQ: FLSP 302.

FLSP 484. ADVANCED TRANSLATION (3). Intensive training in accurate and idiomatic translation of business, administrative, and technical texts from Spanish to English and English to Spanish. PRQ: FLSP 302.

FLSP 486. CONTRASTIVE GRAMMATICAL STRUCTURES IN SPANISH AND ENGLISH (3). Provides knowledge of basic structural differences between Spanish and English. Taught in both languages to demonstrate fundamental interrelationships between the two languages. Emphasis on sensitivity to language interference and other problems of language acquisition. PRQ: FLSP 301.

FLSP 487. HISPANIC DIALECTOLOGY (3). Introduction to the study of variation within the Spanish language in both Spain and the Americas. Focus on the intricate mix of social, political, and historical factors that underlie the natural processes of dialect formation, bilingualism, and multilingualism across linguistic communities around the world. PRQ: FLSP 480 or consent of department.

FLSP 491. HISTORY OF THE SPANISH LANGUAGE (3). Introduction to the origin and evolution of the Spanish language. Emphasis on the phonetic, phonological, and morphosyntactic changes that Latin underwent and eventually gave rise to the Spanish language and on the social, political, and historical circumstances that have shaped the map of the Spanish-speaking world. PRQ: FLSP 480 or 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.

FSMD 347. PROFESSIONAL DEVELOPMENT FOR FASHION MERCHANDISING (3). Exploration of topics in preparation for employment in the fashion industry, including career opportunities in fashion merchandising, job search strategies and skills, and self-assessment as a step toward successful career planning. Ethical issues pertaining to the fashion industry. Development of workplace skills and examination of customer service and leadership philosophies. PRQ: FSMD 152 with a grade of C or better and FSMD 258 with a grade of C or better, and declared fashion merchandising major.

FSMD 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 FSMD 353.

GEOG 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 200.

GEOG 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.

GEOL 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.

GEOL 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.

HDFS 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; at least junior standing; and a grade of C or better in the following: HDFS 230 or EPS 304 or PSYC 324; and HDFS 280 or PSYC 225.

HDFS 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; at least junior standing; and a grade of C or better in the following: HDFS 180 or HDFS 280 or PSYC 225, and HDFS 284.

HDFS 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: HDFS 284; and HDFS 230 or HDFS 280 or EPS 304 or PSYC 225 or PSYC 324.

HDFS 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; at least junior standing; and a grade of C or better in the following: HDFS 280 or PSYC 225, and HDFS 284.

HIST 303. IMPERIAL ROME (3). History of the Roman Empire from the age of Augustus through the third century CE. Themes include the rise of autocracy in Rome, the consolidation of Roman territorial expansion, the formation of an imperial society, the adaptation and resistance to Roman culture and political power, the economy of imperial Rome, and the relationship of the Empire with so-called barbarians.

HIST 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.

***HIST 305. EARLY MIDDLE AGES (3).** Survey of society, culture, religion, politics, and intellectual life during the early Middle Ages (c. 500 - c. 1000). Geographic coverage includes Europe, the Byzantine Empire, and the Islamic Caliphate.

***HIST 306. LATER MIDDLE AGES (3).** Continuation of HIST 305. Survey of society, culture, religion, politics, and intellectual life during the later Middle Ages (c. 1000 - c. 1500). Geographic coverage includes Europe, the Byzantine Empire, and the Islamic Caliphate.

HIST 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.

***HIST 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.

***HIST 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.

***HIST 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.

***HIST 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.

***HIST 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.

HIST 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.

***HIST 373. STRIKES, RIOTS, AND UPRISINGS IN U.S. HISTORY (3).** Focus on selected strikes, riots, insurrections in U.S. history. Topics vary by semester. Exploration of the meanings of specific events to understand the role of conflict in American life, their causes, and long-term significance.

***HIST 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.

***HIST 375. CIVIL RIGHTS MOVEMENT, 1954-1974 (3).** The African-American civil rights movement and the interrelationships among organizations, leaders, communities, and governments.

****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.

***HIST 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.

HIST 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.

***HIST 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.

HIST 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.

HIST 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.

***HIST 434. THE RUSSIAN REVOLUTION (3).** History of Russia's revolutionary upheavals in the early 20th century. Emphasis on the multiple and conflicting ways that participants and scholars have sought to make sense of the revolution.

***HIST 435. STALINISM (3).** History of the Soviet Union under the dictatorship of Joseph Stalin, 1928-1953. Topics include rapid industrialization, collectivization, state terror, communist culture, the gulag, World War II, and the early Cold War.

***HIST 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.

***HIST 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.

HIST 445. THE CHINESE REVOLUTION (3). Intellectual and social backgrounds of the Nationalist revolutionary movement; political history of the revolutionary period to the present.

HIST 447. HISTORY OF BURMA (3). History and culture of Burma from prehistoric times to the present.

***HIST 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.

***HIST 465. GILDED AGE AND PROGRESSIVE ERA (3).** Examines the impact of industrialization and urbanization on vital aspects of American life and society. Topics include racial conflict, imperialism and war, the rise of organized labor, immigration, westward expansion, and social and political reform.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

***HIST 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.

***HIST 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.

***HIST 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.

***HIST 486. INEQUALITY 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 the challenges faced by Latin American countries in addressing poverty and inequality, 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.

HOSP 301. CAREER PLANNING IN THE HOSPITALITY INDUSTRY (2). A comprehensive approach to career planning in the hospitality industry that incorporates self-awareness, career exploration, and self-marketing techniques for use in career decision making and development of job search skills. CRQ: HOSP 202.

HOSP 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: HOSP 425 with a grade of C or better, and MGMT 333.

HSCI 460. 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 100 or STAT 200 UBUS 223; and CHHS major with at least junior standing; or consent of school.

ISYE 492. INDUSTRIAL AND SYSTEMS ENGINEERING SENIOR DESIGN PROJECT PROPOSAL (1). Discussion on global effects of engineering solution including social, environmental, political, economical, and ethical concerns. Emphasis on writing business case or proposal for solving industrial and systems engineering problems. Discussions on teamwork skills, engineering ethics, design cycle, project management, and professional development. PRQ: Senior standing or consent of the department.

ISYE 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: ISYE 492 and at least four of the technical courses required for the engineering management emphasis.

ISYE 494. HEALTH SYSTEMS DESIGN PROJECT (3). 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, ISYE 492, and at least three of the technical courses required for the health systems engineering emphasis, or consent of department.

ISYE 495. SENIOR DESIGN PROJECT (3). 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 and ISYE 492, or consent of department.

ISYE 496. MANUFACTURING SYSTEMS DESIGN PROJECT (3). 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 ISYE 492 and three of the following: ISYE 310, ISYE 430, ISYE 440, ISYE 460, ISYE 480.

JOUR 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 with a grade of C or better or JOUR 200B with a grade of C or better.

JOUR 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 with a grade of C or better or JOUR 200B with a grade of C or better and JOUR 335 with a grade of C or better; or consent of department.

JOUR 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 with a grade of C or better or JOUR 200B with a grade of C or better.

JOUR 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 with a grade of C or better or JOUR 200B with a grade of C or better; or consent of department.

KNPE 310. PSYCHOLOGICAL ASPECTS OF SPORT AND EXERCISE (3). Study of psychological aspects related to sport and exercise participation including application of those principles to preventive and rehabilitative physical activity and sport performance. PRQ: PSYC 102 or PSYC 219.

KNPE 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 324.

KNPE 365. INTRODUCTION TO ADVENTURE EDUCATION (3). Experience in teaching and participating in team-building, initiatives, challenge, and adventure activities. Creation of block, unit, and lesson plans for curriculum development in adventure education. Grade of C or better required in this course for student teaching. PRQ: KNPE 335 and physical education major or minor.

*KNPE 393. SOCIAL ASPECTS OF SPORT (3). Relevance of sport in modern society, impact of sport on society, and the influence which cultural institutions have on sport. Laboratory experiences and personal investigations.

KNPE 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.

KNPE 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.

*LESM 365. COMMUNICATION STRATEGIES IN SPORT AND EXERCISE (3). Application of communication theories to the sport, exercise, and fitness industries. Examination of public and media relations with a special focus on message development, social media, image building and crisis management for sport, exercise, and fitness organizations.

LTLA 341. LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (3). Development of an effective language arts program with emphasis on instructional methods and materials. PRQ: GPA of at least 2.75 and junior standing.

LTRE 311. CONTENT AREA LITERACY INSTRUCTION (3). Developing students' literacy skills and learning strategies in the content areas, and designing and adapting content field materials, texts, teaching strategies, and assessment measures for literacy instruction.

MATH 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. PRQ: MATH 230.

MATH 410. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR THE MIDDLE SCHOOL II (3). Objectives, problems, strategies, and trends in teaching middle school mathematics. Applications of learning theory and research focusing on remediation, presentation of new concepts, 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 middle grades. Not used in major or minor GPA calculations for mathematical sciences majors or minors. For those seeking or holding middle grades education licensure. PRQ: MATH 229 and consent of department

MATH 411. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR SECONDARY SCHOOL I (3). Methods and trends of instruction in the pre-secondary school mathematics with particular focus on mathematical practices and processes. Covers the teaching and learning of rational numbers, algebraic reasoning, patterns, functions, measurement, geometric concepts, and statistics and probability. 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. PRQ: MATH 229 and consent of department.

MCTR 481. MECHATRONICS ENGINEERING SENIOR DESIGN I (3). Complete preparation of an engineering system design or project covering problem identification, conceptual design and analysis, prototyping and the development of a work schedule required to carry out the project. Includes methodology, standards and safety codes, professional ethics, decision making, design evaluations, and oral and written communication. A writing intensive course. Offered in the fall. Students are expected to take MCTR 482 the following spring. PRQ: MCTR 420. CRQ: MCTR 440.

MCTR 482. MECHATRONICS ENGINEERING SENIOR DESIGN II (3). Execution of capstone design project under direct supervision of the instructor or other subject-matter expert. A writing intensive course. Specific sections of the course are offered to students pursuing an emphasis in mechanical engineering. Offered in the spring. Students are expected to take MCTR 481 the previous fall. PRQ: MCTR 481.

MEE 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.

MEE 482. SENIOR MECHANICAL ENGINEERING DESIGN PROJECT (3).
C. Emphasis in Advanced Computing and Simulation
E. Emphasis in Sustainable Energy
M. Emphasis in Mechatronics and Robotics
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.

MEE 485. SENIOR MECHANICAL ENGINEERING DESIGN I (3). Complete preparation of an engineering system design or project covering problem identification, conceptual design and analysis, prototyping and the development of a work schedule required to carry out the project. Includes methodology, standards and safety codes, professional ethics, decision making, design evaluations, and oral and written communication. A writing-intensive course. Offered in the fall. Students are expected to take MEE 486 the following spring. PRQ: MEE 320, MEE 321, and MEE 340. CRQ: MEE 470.

MEE 486. SENIOR MECHANICAL ENGINEERING DESIGN II (3). Execution of capstone design project under direct supervision of the instructor or other subject-matter expert. A writing-intensive course. Specific sections of the course are offered to students pursuing an emphasis in mechanical engineering. Offered in the spring. Students are expected to take MEE 485 the previous fall. PRQ: MEE 485.
C. Emphasis in Advanced Computing and Simulation
E. Emphasis in Sustainable Energy
M. Emphasis in Mechatronics and Robotics

MGMT 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 203 or ENGL 204, and junior standing (all majors). CRQ: MGMT 335 (business majors only).

MGMT 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 each of the following: FINA 320, MGMT 335, MGMT 355, MKTG 295, and OMIS 338.

MKTG 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: FINA 320 and MGMT 335 and MKTG 443 and OMIS 338 and senior standing and marketing major. CRQ: MKTG 99.

MUED 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.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

NNGO 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.

NNGO 495. CAPSTONE SEMINAR IN NONPROFIT AND NGO STUDIES (3). Intensive case study, research paper or other scholarly work in nonprofit and NGO studies. Includes regular meetings and a formal presentation of results at completion. Serves as final capstone project in the NNGO major. PRQ: NNGO majors only, NNGO 100, NNGO 493, and must earn a grade of C or better in NNGO 302.

NURS 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 100 or STAT 200; and NURS 303 and NURS 304 and NURS 305 and NURS 307 and NURS 308; or R.N. status.

NURS 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.

NUTR 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.

NUTR 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.

OMIS 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). CRQ: OMIS 338 and OMIS 351.

OMIS 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: OMIS 338 and OMIS 351 and FINA 320 and MGMT 335 and MKTG 295.

OMIS 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 and OMIS 352 and OMIS 442 and OMIS 452 and OMIS 478.

PHHE 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.

PHHE 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.

PHIL 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.

PHIL 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.

PHYS 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.

POLS 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.

POLS 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.

POLS 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.

PSYC 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

PSYC 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.

PSYC 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.

PSYC 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 one of the following: PSYC 315, PSYC 316, PSYC 332, PSYC 351; or consent of department.

PSYC 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.

PSYC 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.

PSYC 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 351, PSYC 372, PSYC 471, or consent of department.

PSYC 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.

REHB 492. MEDICAL ASPECTS OF DISABILITY IN REHABILITATION (3). Introduction to the anatomy and physiology of select body systems and associated impairments. An emphasis is placed on medical terminology as it relates to comprehension and the provision of rehabilitation services.

SEEC 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.

SEEC 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.

SESE 415. INSTRUCTIONAL METHODS FOR ELEMENTARY STUDENTS WITH MILD DISABILITIES: READING, LANGUAGE ARTS (4). Design, implementation, and adaptation of reading, writing, and spelling curricula for elementary students with mild disabilities. Emphasis on explicit systematic instructional approaches and data-driven decision making related to literacy for students with and at risk for disabilities in the elementary grades. PRQ: SESE 370, LTCY 300. CRQ: ETR 434, SESE 416, and SESE 418.

SESE 444. INSTRUCTIONAL METHODS AND STRATEGIES FOR MIDDLE AND SECONDARY STUDENTS WITH MILD DISABILITIES (3). Study and practice of evidence-based curricula, methods, and strategies for teaching middle and secondary students with mild disabilities. Emphasis on teaching study skills and learning strategies which promote independent learning. PRQ: SESE 415, SESE 416, SESE 417, SESE 418, SESE 419, and ETR 434 or consent of department. CRQ: SESE 446 and SESE 447 and SESE 448 and SESE 449 and LTIC 420.

SOCI 329X. INTERNATIONAL NGOS AND GLOBALIZATION (3). *Crosslisted as ANTH 429X and NNGO 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 452. WOMEN'S HEALTH ISSUES (3). Critical analysis of selected health issues that affect the life experiences of women. Emphasis on feminist theories and the intersections of race, class, and culture to interpret these health-related experiences of women. A culminating experience integrating theory, research, and scholarly writing is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of the department.

SOCI 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. 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

TECH 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.

TECH 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.

TECH 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.

TECH 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.

***TH-D 474. DANCE PHILOSOPHY AND AESTHETICS (3).** Philosophy of dance including aesthetic principles and critical evaluations of varying dance forms and styles.

TH-D 475. HISTORY OF DANCE 17TH CENTURY TO MODERN TIMES (3). Historical development of dance from the 17th century to modern times, considering cultural and artistic interdependencies.

***THEA 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.

THEA 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.

THEA 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.

WGSS 300. RESEARCH METHODS IN WOMEN, GENDER, AND SEXUALITY STUDIES (4). Overview of research methodologies used in feminist and queer research and artistry. Includes hands-on training in data collection and analysis techniques. Required for WGSS majors. Open to WGSS and LGBTQ+ Studies minors. PRQ: WGSS 101; WGSS major; WGSS minor or LGBTQ+ Studies minor with consent of the director or program adviser for the Center for the Study of Women, Gender, and Sexuality.

WGSS 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.

Human Diversity Requirement Course List

ANTH 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.

***ANTH 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.

ANTH 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.

ANTH 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.

^ANTH 409. CULTURES AND SOCIETIES OF THE MIDDLE EAST (3). Studies the peoples and societies of the Middle East and North Africa from an anthropological perspective. Explores problems of crosscultural examination and the role of anthropology in the formation of the idea of the "Middle East" as an area of study. Examines and problematizes key themes commonly linked with the region, such as tribe and state, family and kinship, gender and sexuality, honor and shame, tradition and modernity, and religion and secularism. Includes ethnographies based on field work in the region, contemporary news reports, and films.

ANTH 420. WATERWORLDS (3). *Crosslisted as ENVS 420X.* Exploration of water as a resource under threat and as a window into social worlds. Using crosscultural case studies, concentrates on customs, tools, and ideologies for encountering, appreciating, and controlling water as well as solutions to water scarcity, pollution, and unjust distribution. Seminar-style includes interdisciplinary readings, films, and field trip(s).

ANTH 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.

ANTH 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.

***BIOS 324X. WOMEN IN SCIENCE (3).** *Crosslisted as GEOG 324X and WGSS 324.* 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.

***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.

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.

***COMS 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.

***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 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.

^ENGL 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, Chesnut, 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.

^ENGL 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.

ENGL 434X. LANGUAGE AND GENDER (3). *Crosslisted as WGSS 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.

ENGL 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.

* Available for general education credit.

^ Also a writing-infused course.

ENVS 435X. GENDER AND THE ENVIRONMENT (3). *Crosslisted as WGSS 435*. Topics and issues pertaining to gender and the environment such as the role of gender and other social factors in perceptions, knowledge, and behaviors regarding the environment today and in the past; women's contributions to environmental arts and sciences; the role of gender in environmental activism and policy in the U.S. and around the globe.

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

^EPFE 321. HISTORY OF AMERICAN EDUCATION (3). Survey of American education in relation to the main currents of American history. Includes religious, political, cultural, and demographic influences. PRQ: Sophomore standing.

^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.

*EPFE 440. EDUCATION FOR SOCIAL JUSTICE (3). Examines the social and psychological conditions that give rise to increased levels of violence, aggression, and fear within individuals and societies. Explores how "education for social justice" as a conceptual framework can be best adopted and practiced by educators and citizens to clarify the moral and educational challenges posed by these destructive psychological and cultural patterns of behavior.

*ETT 211. TECHNOLOGY IN A DIVERSE SOCIETY (3). Access, evaluation, and utilization of instructional and social media for various cultures and countries. Topics include appropriateness of technology for diverse audiences, analysis of technology for instructional environments, and analysis of technology for social environments.

^FLBU 482. CENSORSHIP, PROPAGANDA, AND MEDIA BIAS IN SOUTHEAST ASIA AND BEYOND (3). Addresses the question What is the general media landscape like in Southeast Asia? Issues relevant to freedom of expression and cultural production of dissent are addressed. Topics include literature, cartoons, slogans, authoritarian regimes, and social media. Hands-on learning opportunities provide experience in creating digital narratives and interactive contents.

^FLSP 462. SEMINAR ON THE CULTURES OF LATIN AMERICA (3). Analysis of scholarly texts, interpretive essays, other primary sources, and a variety of cultural artifacts (such as films, music, art objects, literary texts) in order to explore Latin America's cultural heritage. PRQ: FLSP 320 or FLSP 361 or FLSP 362, or 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.

FSMD 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: FSMD 152 with a grade of C or better, FSMD 258 with a grade of C or better, FSMD 262, PSYC 102, SOCI 170, or consent of school.

*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 324X. WOMEN IN SCIENCE (3). *Crosslisted as BIOS 324X and WGSS 324*. 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.

HDFS 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: HDFS 284 or SOCI 170.

HDFS 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: HDFS 284 and one of the following: HDFS 230, or HDFS 280/PSYC 225, and at least junior standing.

*HIST 110. HISTORY OF THE WESTERN WORLD I: PROBLEMS IN THE HUMAN PAST (3). Examination and interpretation of major historical problems in the ancient and medieval West before ca. 1500. Emphasis varies by instructor.

*HIST 112. HISTORY OF THE WESTERN WORLD II: PROBLEMS IN THE HUMAN PAST (3). Examination and interpretation of major historical problems in Europe and the Western world after ca. 1500. Emphasis varies by instructor.

*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 I: PROBLEMS IN THE HUMAN PAST (3). Thematic, comparative overview of major problems in human history before 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 305. EARLY MIDDLE AGES (3). Survey of society, culture, religion, politics, and intellectual life during the early Middle Ages (c. 500 - c. 1000). Geographic coverage includes Europe, the Byzantine Empire, and the Islamic Caliphate.

^HIST 306. LATER MIDDLE AGES (3). Continuation of HIST 305. Survey of society, culture, religion, politics, and intellectual life during the later Middle Ages (c. 1000 - c. 1500). Geographic coverage includes Europe, the Byzantine Empire, and the Islamic Caliphate.

HIST 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.

HIST 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.

^HIST 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.

* Available for general education credit.

^ Also a writing-infused course.

HIST 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.

HIST 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.

***HIST 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.

HIST 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.

HIST 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.

^HIST 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.

HIST 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.

^HIST 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.

HIST 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.

***HIST 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.

HIST 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.

***HIST 364. AFRICAN-AMERICAN HISTORY 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.

***HIST 365. AFRICAN-AMERICAN HISTORY 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.

HIST 367. U.S. LGBT HISTORY (3). Formation of modern lesbian, gay, bisexual, and transgender (LGBT) identities, political movements, cultures, and communities in the United States from the 17th to 21st centuries. Topics include the shifting line between "normal" and "queer" sexualities and gender identities as well as average and influential LGBT Americans.

HIST 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.

***HIST 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.

HIST 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.

^HIST 373. STRIKES, RIOTS, AND UPRISINGS IN U.S. HISTORY (3). Focus on selected strikes, riots, insurrections in U.S. history. Topics vary by semester. Exploration of the meanings of specific events to understand the role of conflict in American life, their causes, and long-term significance.

^HIST 374. LATINOS/AS IN THE UNITED STATES (3). A political, social, and cultural survey of Latinos/as in the United States. Themes include colonization, immigration, race and ethnicity, gender and sexuality, religion, education, language, labor, politics, and popular culture, regional labor markets, formation of internal colonies, and political and cultural developments.

^HIST 375. CIVIL RIGHTS MOVEMENT, 1954-1974 (3). The African-American civil rights movement and the interrelationships among organizations, leaders, communities, and governments.

HIST 376. U.S. CAPITALISM AND ITS CRITICS (3). Historical development of capitalism as it developed in the United States, as well as the global influence of U.S.-based capitalism. Explores ideas, institutions, groups, and critics in each period.

***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.

^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.

***HIST 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.

HIST 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.

* Available for general education credit.

^ Also a writing-infused course.

HIST 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.

*HIST 388. THE CUBAN REVOLUTION AND ITS LEGACY (3). History of the Cuban Revolution in the mid twentieth century and its long-term effects on Latin America, Africa, Southeast Asia, the United States, and Soviet Union. Emphasis on methods of insurgency and contributions to democratic politics and nation building for countries in the Third World.

HIST 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.

^HIST 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.

HIST 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.

HIST 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.

HIST 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.

HIST 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.

^HIST 434. THE RUSSIAN REVOLUTION (3). History of Russia's revolutionary upheavals in the early 20th century. Emphasis on the multiple and conflicting ways that participants and scholars have sought to make sense of the revolution.

^HIST 435. STALINISM (3). History of the Soviet Union under the dictatorship of Joseph Stalin, 1928-1953. Topics include rapid industrialization, collectivization, state terror, communist culture, the gulag, World War II, and the early Cold War.

^HIST 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.

HIST 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.

HIST 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.

^HIST 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.

HIST 452. BRITISH EMPIRE (3). History of the British Empire, with a particular focus on developments from 1750 to the present. Topics include the relationship between economic change and imperial expansion and decline, gender, race, the role of violence, nationalism and decolonization.

HIST 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.

HIST 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.

^HIST 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.

HIST 464. CIVIL WAR ERA (3). Examines the causes and consequences of the American Civil War. Topics include race and slavery in the early republic, the development of antislavery and proslavery ideologies, territorial expansion, and the history and legacy of war and Reconstruction.

^HIST 465. GILDED AGE AND PROGRESSIVE ERA (3). Examines the impact of industrialization and urbanization on vital aspects of American life and society. Topics include racial conflict, imperialism and war, the rise of organized labor, immigration, westward expansion, and social and political reform.

HIST 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.

HIST 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.

HIST 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.

HIST 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.

^HIST 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.

* Available for general education credit.

^ Also a writing-infused course.

HIST 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.

[^]HIST 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.

HIST 480. SPIES, LIES AND SECRET WARS: CIA IN THE WORLD (3). Involvement of the Central Intelligence Agency (CIA) with various peoples, governments and events around the globe.

HIST 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.

[^]HIST 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.

[^]HIST 486. INEQUALITY 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 the challenges faced by Latin American countries in addressing poverty and inequality, 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.

HOSP 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: HOSP 418.

HSCI 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 consent of school.

KNDN 351. MULTICULTURAL DANCE (3). Analysis of movements and teaching strategies for multicultural dance. Promotes skill development in the dance forms and understanding of our global society. PRQ: Physical education major or minor.

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

*[^]KNPE 393. SOCIAL ASPECTS OF SPORT (3). Relevance of sport in modern society, impact of sport on society, and the influence which cultural institutions have on sport. Laboratory experiences and personal investigations.

KNPE 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 443. CRQ: Two semester hours in KNPE 493.

KNPE 474. MEDICAL ISSUES IN ATHLETIC TRAINING (3). Nonorthopedic medical conditions common to the physically active population. Discussions focus on pathology, etiology, signs and symptoms, clinical assessments, and indicators for referral and other plans of action. PRQ: KNPE 323.

LESM 152. PERSPECTIVES IN U.S. SPORT (3). Survey on the emergence of modern-day sports and the role they play in the United States. Focus on past and recent events in U.S. sports during the 19th, 20th, and 21st centuries.

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.

LTIC 400. INTRODUCTION TO TEACHING ENGLISH LANGUAGE LEARNERS (3). Survey of practices and principles for teaching English language learners in multilingual contexts.

LTIC 445. APPLIED LINGUISTICS FOR TEACHERS OF ENGLISH LANGUAGE LEARNERS (3). Applications of linguistic principles in teaching and learning of English language learners.

MKTG 280. HUMAN DIVERSITY MARKETING STRATEGIES (1). Examination of various marketing segments from diverse consumer populations, learning to appreciate consumer diversity within the context of commercial and non-profit marketplace exchanges. An appreciation for working with ethnic, multicultural, marginalized, or stigmatized consumers and employees will be acquired. PRQ: College of Business majors only, or by consent of department.

MUHL 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.

NURS 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.

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.

*PHIL 251. PHILOSOPHY OF RACE (3). Investigation of fundamental questions about race and racism, such as: What is race? How do racial stereotypes affect reasoning? What is racism? How is racism related to sexism? What is the ethical response to racism?

PHIL 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?

POLS 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.

POLS 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.

POLS 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.

*REHB 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.

* Available for general education credit.

[^] This is a writing-infused course.

*SESE 320. DISABILITY IN FILM (3). Examination of how individuals with disabilities are represented in motion pictures and television. Special emphasis is placed on how film depicts individuals with disabilities and one's personal reflection of attitudes, beliefs, and understandings of disability.

*SEVI 205. THE BLINDNESS EXPERIENCE (3). Exploration of diverse views of blindness, underlying societal factors that influence these views, and adaptations commonly used by people who are blind or have low vision to maximize their independence, health, and wellness in daily life.

TLCI 301X. TEACHING WITH A MULTICULTURAL PERSPECTIVE (3). *Crosslisted as LTIC 301*. Examination and application of content materials focusing on cultural and linguistic diversity in the classroom and in society. Emphasis on role of teacher and school in providing information and instruction that promotes equitable and multicultural education for all students. Designed primarily for preservice teachers.

*WGSS 101. INTRODUCTION TO WOMEN, GENDER, AND SEXUALITY STUDIES (3). Introduction to the study of women, gender, and sexuality in the contemporary U.S., with an emphasis on diversity, feminisms, LGBTQ+ communities, and social change.

WGSS 201. GLOBAL GENDER ISSUES (3). Introduction to how gender, power and sexual orientation influence access to resources globally, as well as gendered experiences and livelihood strategies in different societies around the world.

*WGSS 202. WOMEN AND CULTURAL EXPRESSION (3). Explores women and their roles as producers of and subjects in various cultural expressions in the U.S. and other societies. Culture includes visual and performing arts, literature, film, and other expressions throughout history.

*WGSS 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.

WGSS 332. GROWING UP GIRL (3). Examination of the experience of growing up as a girl from an interdisciplinary perspective, with attention to differences and similarities in ethnicity, race, gender identity, class, and sexual orientation. Theories and research on identity 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, WGSS 101, or WGSS 202; or consent of department.

WGSS 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.

WGSS 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.

WGSS 435. GENDER AND THE ENVIRONMENT (3). *Crosslisted as ENVS 435X*. Topics and issues pertaining to gender and the environment such as the role of gender and other social factors in perceptions, knowledge, and behaviors regarding the environment today and in the past; women's contributions to environmental arts and sciences; the role of gender in environmental activism and policy in the U.S. and around the globe.

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.

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 Progressive Learning in Undergraduate Studies (PLUS) General Education Program at Northern Illinois University provides foundational skills and breadth of knowledge through study in a broad variety of disciplines. Together with course work in the major and co-curricular experiences, general education provides students with opportunities to develop competencies in NIU's baccalaureate student learning outcomes. The baccalaureate experience at Northern Illinois University challenges students to think critically, create, and communicate by participating in a progressive, engaged learning environment. Major area studies, general education, and co-curricular experiences prepare students to become productive members of a culturally and globally diverse society, and lifelong learners ready to meet the challenges of a dynamic career. See: "The Baccalaureate Experience" for a listing of the baccalaureate outcomes.

* Available for general education credit.

Framework

The PLUS General Education Program consists of two types of course work.

First, Foundational Studies courses develop the competencies necessary to succeed academically and personally. They emphasize students' abilities to: (1) think critically and creatively; (2) reason quantitatively and qualitatively; (3) communicate clearly and effectively; and (4) work collaboratively across disciplines.

Second, Knowledge Domain courses continue to develop foundational competencies, as well as assure exposure to a broad array of ideas, disciplines, and ways of obtaining and interpreting information. The three knowledge domains are Creativity and Critical Analysis, Society and Culture, and Nature and Technology. Knowledge Domain courses emphasize students' abilities to: (1) connect human life to the natural world; (2) understand and respect diverse cultures; (3) integrate knowledge of global interconnections; and (4) synthesize knowledge and skills.

Knowledge Domain requirements may optionally be fulfilled by a set of PLUS Pathways courses. A Pathway is a body of coursework drawn from all three Knowledge Domains that examines a theme from different disciplinary perspectives. The Pathways take the disciplinary breadth inherent in the Knowledge Domain component of general education, and comprise courses that address a set of common questions. The purpose of a Pathway is to provide coherence and relevance to general education, and allow students to choose a general education experience that aligns with their interests and goals. Pathways will further enhance content integration and will give students and instructors greater opportunities to develop the skill of collaborating effectively across disciplines.

Foundational Studies

Through Foundational Studies, students will begin to develop the fundamental skills of written communication, oral communication, and numeracy, all of which are required for academic, professional, and personal success. Students will learn to: (1) write skillfully with a thorough awareness of context, audience, and purpose; (2) communicate effectively through speaking, presenting, and debating, with an awareness of the specific practices in different disciplines; (3) perform basic numerical computations, display facility with using formal and quantitative reasoning analysis and problem solving, and interpret mathematical models and statistical information; and (4) work collaboratively with peers from different backgrounds.

The Foundational Studies general education requirements consist of two courses in Writing Composition, one course in Oral Communication, and one course in Quantitative Literacy. Foundational Studies courses do not count toward general education Knowledge Domain requirements.

All students must satisfy the Foundational Studies requirements in Writing Composition, Oral Communication, and Quantitative Literacy for 3-12 semester hours of general education credit.

The requirements in the Foundational Studies can be met by completing the designated course, by transfer credit, by passing a competency examination, or, for some Foundation Studies, through credit by examination. (See "Credit by Examination.") Although passing a competency examination fulfills the requirement for the Foundational Studies, 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 Foundational Studies requirements are listed below.

Foundational Studies Writing Requirement:

100-level Rhetoric and Composition (0-3 semester-hours). Writing and revising argumentative and analytical essays. This requirement can be satisfied by:

- Obtaining a grade of C or better in ENGL 103 or an equivalent course, or
- Obtaining equivalent transfer credit, or
- Passing the Writing Composition Foundational Studies Competency Examination, or
- Obtaining credit for ENGL 103 through examination by credit (Advanced Placement).

200-level Writing in the Domains (3 semester-hours). Writing and revising argumentative and analytical essays; analyze, evaluate, and synthesize material from a variety of sources; incorporate knowledge-domain-appropriate writing and rhetorical styles as well as documentation styles. This requirement can be satisfied by:

- Obtaining a grade of C or better in ENGL 203, ENGL 204, or an equivalent course, or
- Obtaining equivalent transfer credit, or

Foundational Oral Communication Requirement (0-3 semester hours):

This requirement can be satisfied by:

- Passing COMS 100, or an equivalent course, or
- Obtaining equivalent transfer credit, or
- Passing the Oral Communication Foundational Studies Competency Examination.

Foundational Quantitative Literacy Requirement (0-3 semester hours):

This requirement can be satisfied by:

- passing MATH 101 or equivalent course, or
- obtaining a C or better in MATH 155, MATH 201, MATH 206, MATH 210, MATH 211, or MATH 229, or an equivalent course,
- 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 100, STAT 300, or ISYE 335; and obtaining
 - o a grade of C or better in MATH 110, or
 - o an ACT mathematics score of at least 24, or
 - o an SAT mathematics score of at least 560, or
 - o an A- or B-level placement on the mathematics placement examination
- obtaining equivalent transfer credit, or
- passing the Mathematics Competency Examination.

Foundational Studies 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 foundational studies writing requirement.

[^] Also a Writing Infused Course.

[#] Fulfills the Human Diversity Requirement.

ENGL 203. RHETORIC AND COMPOSITION II, RESEARCHED WRITING IN THE DOMAINS (3). Critical reading and research-based writing with emphasis on the writing process and preparing students to participate in professional and academic discussions in the three domains: Creativity and Critical Analysis, Nature and Technology, and Society and Culture. Basic research methodology, source evaluation, and collaborative projects required in all sections. Not used in calculating English major or minor GPA. Grade of C or better required to satisfy foundational studies writing requirement.

203A. Researched Writing across the Three Domains

203B. Researched Writing in Creativity and Critical Analysis

203C. Researched Writing in Nature and Technology

203D. Researched Writing in Society and Culture

PRQ: ENGL 103 with a grade of C or better.

ENGL 204. RHETORIC AND COMPOSITION, ACCELERATED RESEARCHED WRITING IN THE DOMAINS (3). Concentrated rhetorical approach to critical reading and research-based writing with emphasis on the writing process and preparing students to participate in professional and academic discussions in the three domains: Creativity and Critical Analysis, Nature and Technology, and Society and Culture. Basic research methodology, source evaluation, and collaborative projects required in all sections. Students with credit for ENGL 204 may not take ENGL 103 or ENGL 203. Not used in calculating English major or minor GPA. Grade of C or better required to satisfy foundational studies writing requirement. PRQ: Placement only through foundational studies writing examination or a score of 30 or higher on the ACT combined English/Writing Test.

ISYE 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.

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 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.

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 previous credit in MATH 155, 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: MATH 110 with a grade of C or better, or previous credit in MATH 210, or satisfactory performance on the Mathematics Placement Examination.

MATH 211. CALCULUS FOR BUSINESS AND SOCIAL SCIENCE (4). 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.

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.

STAT 100. 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, statistics, or actuarial science majors or minors.

STAT 300. 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.

Knowledge Domain Requirements and Course Descriptions

There is a required minimum of 21 semester hours in the three General Education Knowledge Domains. The three General Education Knowledge Domains are areas of human endeavor (Creativity and Critical Analysis; Nature and Technology; Society and Culture) and will: (1) help students attain a sound liberal education and acquire sufficient general knowledge and intellectual versatility to become productive and resourceful members of society, (2) explore human thought and relations in order to understand and respect cultural heritage, (3) provide an understanding of the scientific method and the application of scientific facts and principles pertaining to the natural and technological worlds, and (4) examine the role of knowledge in promoting human welfare.

The required minimum of 21 semester hours in Knowledge Domain studies cannot include more than two courses in any one department. (A course with an affiliated laboratory course shall be counted as a single course.)

[^] Also a Writing Infused Course.

[#] Fulfills the Human Diversity Requirement.

A maximum of two approved general education courses in the student's major department may be used to fulfill general education requirements. (A course with an affiliated laboratory course shall be counted as a single course.)

The 21 general education semester hours required in the three Knowledge Domains can be earned by: (1) completion of designated courses; (2) general education credit articulation; (3) transfer articulation; or (4) credit by examination.

Foundational Studies courses do not count toward general education Knowledge Domain requirements. Any single course cannot count towards fulfilling more than one Knowledge Domain requirement.

Creativity and Critical Analysis (a minimum of 6 semester hours)

Courses in Creativity and Critical Analysis challenge students to develop the skills involved in critical reflection and creative expression. Students will: (1) become acquainted with methods for analyzing primary sources and critically evaluating the ideas, events, traditions, and belief systems that have shaped human experience and expression; (2) explore fundamental modes of aesthetic and creative expression; and (3) understand and evaluate the diversity of humanity's most notable cultural achievements from artistic, historical, linguistic, literary, and philosophical perspectives.

Nature and Technology (a minimum of 6 semester hours)

Courses in Nature and Technology develop students' understanding of the role of science, technology, engineering, and mathematics and their relevance to societal issues. This domain encompasses human activities through which we observe, measure, model, and interpret the natural world and physical universe. Courses will explore the process of scientific discovery and how the resulting knowledge is applied to understand technological and societal change. Students will: (1) be able to articulate society's connections to, and responsibility towards, the natural world; and (2) learn to apply the scientific method, including assessing empirical data, investigating the predictions of existing theories, and developing experimentally testable hypotheses.

Society and Culture (a minimum of 6 semester hours)

Courses in Society and Culture develop understanding of the methods of inquiry used to study humanity, from individual behavior to how people organize and govern nations, societies, and cultures. Students will: (1) learn the role, principles, and methods of social and behavioral science in understanding individual and collective behavior in society; (2) hone the reasoning skills required to understand theories of human behavior and social phenomena; and (3) develop the ability to understand and evaluate the communication of results in the social and behavioral sciences.

Elective from any Knowledge Domain (1 course, a minimum of 3 semester hours)

Knowledge Domain Course Descriptions

Creativity and Critical Analysis

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 civilizations of antiquity. Examination of ancient achievements and values from humanistic and artistic perspectives.

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

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.

ART 101. DRAWING FOUNDATION II (3). Further exploration of basic drawing media. Development of skill in representation and interpretation of subjects.

ART 102. 2-D FOUNDATION (3). Comprehensive study of design elements and principles through the study of two-dimensional space. Emphasis on inventiveness in the use of various media. Studio and lecture.

ART 103. 3-D FOUNDATION (3). Intensive study of form and structure in three-dimensional space. Studio and lecture.

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

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

ARTH 294. INTRODUCTION TO ARTS OF ASIA (3). Arts of the Middle East, Far East, and Southeast Asia.

ARTH 340. STUDIES IN MODERN ART (3).

- A. 19th Century Art
- B. 20th Century Modernism
- C. Thematic Subjects

History, theory, and criticism of various aspects of 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.

ARTH 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.

ARTH 362. HISTORY OF VISUAL COMMUNICATION (3). History, theory, and criticism of visual communication in print culture and new media.

COMS 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.

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.

COMS 230. RHETORIC AND THE MEDIA (3). Role of media messages in selecting, structuring, and presenting versions of reality. Effects on individuals and society.

COMS 356. CRITICAL INTERPRETATIONS 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 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.

ENGL 110. LITERATURE AND POPULAR CULTURE (3). Exploration of drama, fiction, film, graphic novels, poetry, and television adaptations to see how writers convince readers to enter the worlds and believe in the characters they create. Survey with selected authors.

ENGL 115. BRITISH IDENTITIES, BRITISH LITERATURE (3). Britain's literary traditions and cultures through novels, poetry, drama, non-fiction, and short stories that have captivated readers from early times to now. Historical survey with selected authors.

ENGL 116. AMERICAN IDENTITIES, AMERICAN LITERATURE (3). Who Americans are and what shapes their beliefs. Fiction, poetry, nonfiction, and dramatic works that have challenged or complicated what it means to be "American." Historical survey with selected authors.

ENGL 117. LITERATURE OF SOCIAL JUSTICE (3). Literary exploration of how poverty, discrimination, and systematic oppression have affected diverse people who sought equal opportunity and basic human rights. Survey of fiction, nonfiction, drama, and poetry by selected British, postcolonial, and American authors will demonstrate how creative works have raised readers' critical consciousness in different periods and contexts.

^ENGL 310. IDEAS AND IDEALS IN WORLD LITERATURE (3). Translations of epics, religious writings, treatises on love, myths, novels, essays, and plays—ancient to modern, Eastern and Western. How to define what the "classics" are and explore why these works endure. Survey with selected authors.

^ENGL 315. READINGS IN SHAKESPEARE (3). Plays and poetry that continue to engage modern audiences with exploration of perennial themes and vivid representations of human experience and conflicts. Credit available for general education and educator licensure candidates in English Language Arts in middle school.

ENGL 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.

^ENGL 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.

ENGL 361. LITERATURE OF HEALTHCARE (3). Thematic exploration of disease, health care, and medicine in works from various literary periods and cultures. Survey of fiction, nonfiction, drama, and poetry by selected British, postcolonial, and American authors.

*^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 400. FOUNDATIONS OF EDUCATION (3). Sociological, philosophical, and historical foundations of education. Curriculum development, multicultural concerns, and school organization are addressed in relation to teaching.

^EPFE 410. PHILOSOPHY OF EDUCATION (3). Differentiates philosophy of education from other basic inquiry into education. Emphasis on standard forms of philosophical reasoning. Exploration of leading writings for their relevance to the improvement of instruction in a sociocultural context.

EPS 300. EDUCATIONAL PSYCHOLOGY (3). Application of psychological principles to teaching with attention given to the learning process. PRQ: GPA of 2.00 or higher and PSYC 102.

^EPS 430. BECOMING ADULT IN POSTMODERN CONTEXTS (3). A cross-disciplinary approach to explore the meaning(s) of adulthood and the reasons for the delay in the transition to adulthood in contemporary society utilizing psychological, sociological, historical, and anthropological approaches. Focus on identity theories, postmodern critiques of identity, and contested definitions of adulthood. Reflection on identity development and growth toward adulthood is encouraged. PRQ: PSYC 102.

ETT 231. DIGITAL VISUAL LITERACY FOR LEARNING (3). Exploration of the historical background and practice involved in digital visual literacy. Review the use and design of various digital media communications. Develop understanding of the interpretation of digital visual literacy. Create and integrate digital visual literacy into professional practice for various audiences.

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 361. 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.

FSMD 262. DESIGN TRENDS IN WESTERN COSTUME (3). Survey of the evolution of styles in western dress from ancient Egypt, Greece, and Rome through the 20th century. Examination of factors impacting stylistic trends within and across eras. Study of social conditions necessary for the fashion process, as well as sources of new styles and how they diffuse within populations.

*HIST 110. HISTORY OF THE WESTERN WORLD I: PROBLEMS IN THE HUMAN PAST (3). Examination and interpretation of major historical problems in the ancient and medieval West before ca. 1500. Emphasis varies by instructor.

*HIST 112. HISTORY OF THE WESTERN WORLD II: PROBLEMS IN THE HUMAN PAST (3). Examination and interpretation of major historical problems in Europe and the Western world after ca. 1500. Emphasis varies by instructor.

*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 I: 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 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.

*HIST 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.

*HIST 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.

^ Also a Writing Infused Course.

* Fulfills the Human Diversity Requirement.

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.

JOUR 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.

*KNPE 393. SOCIAL ASPECTS OF SPORT (3). Relevance of sport in modern society, impact of sport on society, and the influence which cultural institutions have on sport. Laboratory experiences and personal investigations.

LATS 100. INTRODUCTION TO LATIN AMERICAN STUDIES (3). Introduction to Latin American studies with consideration of anthropology, art, history, literature, politics, popular culture, transnationalism, and the role of race, ethnicity, and gender in society.

LESM 152. PERSPECTIVES IN U.S. SPORT (3). Survey on the emergence of modern-day sports and the role they play in the United States. Focus on past and recent events in U.S. sports during the 19th, 20th, and 21st centuries.

LTRE 190. COLLEGE READING AND STUDY STRATEGIES (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.

MEE 382. DESIGN THINKING (3). A semester-long process of applying Design Thinking to come up with solutions to so-called “wicked problems” that are open ended and often ill defined. The process consists of formal steps and techniques to understand and empathize with users’ perspectives; to produce a coherent vision out of messy problems; to generate a wide variety of possible solutions; and to develop low fidelity prototypes to be tested and evaluated. Brings together student innovators with varied backgrounds and viewpoints, enabling breakthrough insights and solutions to emerge from the diversity. PRQ: Consent of department.

MGMT 227. ENTREPRENEURSHIP, INNOVATION, AND SUSTAINABILITY (3). Examination of strategic aspects of launching and scaling an entrepreneurial venture with a focus on opportunity identification, feasibility analysis, sustainability and business planning. Develops knowledge about innovation in a variety of contexts. PRQ: Sophomore, junior, or senior standing; or consent of department.

MGMT 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: Sophomore, junior, or senior standing.

MGMT 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. PRQ: Sophomore, junior, or senior standing.

MUHL 220. INTRODUCTION TO WESTERN MUSICAL TRADITIONS (3). A course designed to broaden understanding of musical traditions of Europe and North America. Emphasis is placed on the study of major composers, styles, genres, and social and historical context. Students engage with music through listening, live performance, and interaction with other musicians. Open to all majors.

MUHL 221. INTRODUCTION TO JAZZ MUSIC (3). Enhance an understanding, appreciation, and enjoyment of jazz. Divided broadly into three activities: study of music fundamentals, rhythmic structure, and form; listening lessons arranged to illustrate the evolution of jazz music; and study of the origins of this American art form and its relationship to the social, economic, and political climates in which it developed.

MUHL 222. WORLD MUSIC AND CULTURE (3). Surveys the unique and changing meanings of music from historical, political, and religious perspectives through engagement in interactive musical activities. Examination of specific musical practices of various world cultures, how music is perceived within its sociocultural context, and establishment of a mindset for global interconnections.

PHIL 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?

PHIL 103. CONTEMPORARY ISSUES IN ETHICS (3). Consideration of problems of value and conduct, related to questions such as: Is capital punishment justified? Is abortion permissible? Is there a duty to help the poor? Do animals have rights? Should physician-assisted dying be allowed?

PHIL 105. LOGIC AND CRITICAL REASONING (3). Introduction to basic principles of reasoning, designed to help students evaluate arguments in everyday life. Topics include deductive reasoning, informal fallacies, inductive reasoning, causal inference, and the nature of evidence and proof.

*PHIL 251. PHILOSOPHY OF RACE (3). Investigation of fundamental questions about race and racism, such as: What is race? How do racial stereotypes affect reasoning? What is racism? How is racism related to sexism? What is the ethical response to racism?

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 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.

*SESE 320. DISABILITY IN FILM (3). Examination of how individuals with disabilities are represented in motion pictures and television. Special emphasis is placed on how film depicts individuals with disabilities and one’s personal reflection of attitudes, beliefs, and understandings of disability.

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.

TH-D 474. DANCE PHILOSOPHY AND AESTHETICS (3). Philosophy of dance including aesthetic principles and critical evaluations of varying dance forms and styles.

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.

THEA 370. HISTORY OF THEATRE AND DRAMA (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.

* Fulfills the Human Diversity Requirement.

THEA 379. PERSPECTIVES ON CREATIVITY (3). Overview of creative and divergent thinking in art, business, politics, education and engineering. Collection and comparison of examples of creative lives and creative activities. Mapping of personal creative potential through a variety of practical exercises.

UBUS 110. BUSINESS IN ACTION (3). Introduction to the functions, language, etiquette, opportunities, and roles of ethics and innovation in modern business. Includes analysis and innovative solution development for a business problem and exploration of a personalized plan for academic and professional success. Emphasis placed on oral and written business communications and reflective thinking.

WGSS 202. WOMEN AND CULTURAL EXPRESSION (3). Explores women and their roles as producers of and subjects in various cultural expressions in the U.S. and other societies. Culture includes visual and performing arts, literature, film, and other expressions throughout history.

Nature and Technology

ANTH 103. THE GREAT APES (3). Introduction to the Great Apes from the perspective of biological anthropology. Review of the anatomy, evolution, taxonomy, social organization, feeding ecology, evidence of culture and tool use, language skills, and conservation status of the chimpanzees, bonobos, gorillas and orangutans.

ANTH 240. BECOMING HUMAN: DISCOVERING HUMAN ORIGINS (3). Who are we, and where did we come from? An overview of the evolution of modern humans. Topics include human biology, human variation, basic principles of genetic inheritance, evolutionary history, living primates, and the human fossil record. Hands-on learning opportunities will provide experience in understanding scientific attempts to reconstruct our past.

ARTH 331. ART, NATURE AND TECHNOLOGY 1400 TO 1800 (3). Examination of mathematical and scientific principles used by artist-scientists to create art and architecture from 1400 to 1800. Exploration of the ancient roots of these principles and their continuing currency in artist-scientists' achievements today.

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.

BIOS 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.

BIOS 105. GENERAL BIOLOGY LABORATORY (1). Optional laboratory designed to accompany BIOS 103. Not open for credit for majors in biological sciences. CRQ: BIOS 103.

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 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.

CHEM 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.

CHEM 212. GENERAL CHEMISTRY LABORATORY I (1). Designed to accompany CHEM 210. One 3-hour period per week. CRQ: CHEM 210.

CHEM 213. GENERAL CHEMISTRY LABORATORY II (1). Designed to accompany CHEM 211. One 3-hour period per week. 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.

ENVS 210. INTRODUCTION TO SUSTAINABLE FOOD SYSTEMS (3). Overview of how Illinois residents have responded to food problems through local initiatives. Examines different local food models used in DeKalb County and northern Illinois. Local public gardens will be used to explore soil science, food justice, local food, project management, public health, and environmental issues. Opportunities for several on-site visits to food production operations in the region. Two hours of lecture and three hours of laboratory work in local public gardens per week.

ETR 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: Consent of the department.

ETT 234. LEARNING WITH TECHNOLOGY (3). Overview of current and emerging interactive technology (hardware and software) used to support learning in various settings. Reviews the development of technology tools for learning in different settings from the past to current technologies with hands-on experience with these technologies.

GEOG 101. INTRODUCTION TO ENVIRONMENTAL 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.

[^] Also a Writing Infused Course.

[#] Fulfills the Human Diversity Requirement.

GEOG 105. WEATHER, CLIMATE, AND YOU (3). Introduction to the science of weather and climate. Solar radiation, energy transfer and the seasons. Clouds and precipitation, weather systems and extreme weather. Climate variability and change. Impacts on humans and the environment. Three hours of lecture.

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.

GEOG 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 relationship 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.

GEOL 101. GEOLOGY OF NATIONAL PARKS (3). Exploration of the most distinctive and intriguing features of America's National Parks in a geologic context. Focus on the origin and evolution of landforms in various national parks and the geologic processes that created and sculpted them. National Parks serve discussions on society's impact on the lithosphere, hydrosphere, atmosphere, and biosphere.

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. GEOLOGIC RESOURCES AND THE ENVIRONMENT (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. PLANET EARTH (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. PLANET EARTH LABORATORY (1). Laboratory experience with individual exploration of topics and subjects best presented in a hands-on environment. CRQ: GEOL 120.

GEOL 303. DIAMONDS, GEMS, AND OTHER PRECIOUS STONES (3). Origin, occurrence, and physical properties of diamonds and other common gem minerals. Physical properties of the gems will be related to their chemistries, crystal structures, and optical characteristics. Methods and instruments used in the determination of a gem will also be presented. Includes discussion of social impacts of gemstone mining, as well as recent advances in the production of synthetic gems, and how to distinguish them from natural samples.

GEOL 304. DIAMONDS, GEMS, AND OTHER PRECIOUS STONES LABORATORY (1). Hands-on analyses of select gem minerals and the techniques used to characterize gems. Designed to accompany GEOL 303. One two-hour period per week.

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.

#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.

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.

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.

ISYE 250. INTRODUCTION TO LEAN SYSTEMS ENGINEERING (3). 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.

ISYE 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.

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.

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.

NUTR 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 309. PRQ: BIOS 103, BIOS 109, BIOS 208, or equivalent.

OMIS 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.

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.

[^] Also a Writing Infused Course.

[#] Fulfills the Human Diversity Requirement.

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 151. PHYSICS LABORATORY (1). Selected experiments designed to accompany PHYS 150. One two-hour laboratory per week. CRQ: PHYS 150.

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 253. PRQ: MATH 155 or equivalent or CRQ: MATH 229.

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 273. PRQ: PHYS 210 or PHYS 253.

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

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

PSYC 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.

PSYC 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.

STAT 200. 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, statistics, or actuarial sciences. Not used in major GPA calculation for mathematical sciences, statistics, or actuarial science majors. PRQ: MATH 206 or MATH 210 or MATH 211 or MATH 229.

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 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.

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.

Society and Culture

ANTH 104. ANTHROPOLOGY OF POP CULTURE: MAKING THE FAMILIAR STRANGE (3). Examination of American popular culture as a widely-shared and contested set of beliefs, values, and practices embodied in a variety of topics such as consumerism, sports, race and ethnicity, poverty and social mobility, food systems, sex and sexual orientation, and globalization. All topics are critically examined in a cross-cultural and/or cultural evolutionary anthropological context.

ANTH 105. ARCHAEOLOGY MYTHS AND MYSTERIES (3). Examines how archaeologists study the remains of the past to understand prehistoric people and their lifeways. Develops methods for critically evaluating the archaeological records. Explores concepts characterizing science and pseudoscience to develop criteria for distinguishing the two.

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 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.

#ANTH 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 the changing patterns of kinship, social organization, economics and religion, as well as first-person literary accounts.

ANTH 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.

ART 465. INTRODUCTION TO MUSEUM STUDIES (3). Survey of the history and philosophy of museums and museum typology. Overview of the purposes, structure, and operations of museums with attention to current issues and practices relating to ethics, collections, exhibitions, and education. Lectures, discussion, museum field trips, museum practicum. PRQ: Junior standing.

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.

[^] Also a Writing Infused Course.

[#] Fulfills the Human Diversity Requirement.

^ARTH 310. STUDIES IN ANCIENT ART 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.

^ARTH 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.

^ARTH 330. STUDIES IN EARLY MODERN 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.

^ARTH 360. STUDIES IN DESIGN (3).

- A. Modern and Postmodern Architecture
- B. From Print Culture to New Media
- C. From Craft to Industry
- D. 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.

^ARTH 361. HISTORY OF SUSTAINABLE DESIGN (3). History, theory, and criticism of sustainable design from the 18th century to the present.

^ARTH 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.

^ARTH 380. STUDIES IN AFRICAN, OCEANIAN, NATIVE AMERICAN, PRE-COLUMBIAN, 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.

#BIOS 324X. WOMEN IN SCIENCE (3). *Crosslisted as WGSS 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.

#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.

BKST 300. FOUNDATIONS OF BLACK STUDIES (3). Introduction to the development, philosophy, and history of black studies.

BKST 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.

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, and audiologists as well as the implications of assisting individuals with communicative disorders in social, educational, and vocational settings.

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 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.

COMS 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. Communication/Journalism double majors who take COMS 403 must take an additional Journalism course from the News in Society course block.

#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.

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 186. INTRODUCTION TO ENVIRONMENTAL ECONOMICS (3). Overview of economic analyses of environmental issues such as pollution and resource management. Introduction to marginal thinking, market-based solutions, and government management. Focus on current issues and applying economics in an interdisciplinary manner to other environmental fields.

[^] Also a Writing Infused Course.

[#] Fulfills the Human Diversity Requirement.

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.

^ENGL 318. EXPLORING HUMAN LANGUAGE (3). Introduction to principles of linguistic analysis. Additional topics may include biological foundations of language, linguistic variation and change, language acquisition, and classification of world languages.

ENVS 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.

***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 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.

***EPFE 440. EDUCATION FOR SOCIAL JUSTICE (3).** Examines the social and psychological conditions that give rise to increased levels of violence, aggression, and fear within individuals and societies. Explores how "education for social justice" as a conceptual framework can be best adopted and practiced by educators and citizens to clarify the moral and educational challenges posed by these destructive psychological and cultural patterns of behavior.

EPS 307. DEVELOPMENT OF THE ADOLESCENT (3). Intellectual, social, personality, and physical development of the adolescent. Emphasis on implications for school practice. PRQ: PSYC 102.

ETR 451. COMMUNITY-BASED AND PARTICIPATORY ACTION RESEARCH (3). Introduction to theories and practice of Participatory Action Research (PAR) and Community-based research. Emphasis on hands-on fieldwork in a community setting to investigate a particular issue or problem.

***ETT 211. TECHNOLOGY IN A DIVERSE SOCIETY (3).** Access, evaluation, and utilization of instructional and social media for various cultures and countries. Topics include appropriateness of technology for diverse audiences, analysis of technology for instructional environments, and analysis of technology for social environments.

ETT 329. LEARNING IN THE DIGITAL AGE (3). Survey of emerging technologies and tools that are transforming our society and schools, as well as the implications these changes have for learning. Emphasis on the skills and knowledge students need to learn effectively and live productively in an increasingly global and digital world.

FINA 315. PERSONAL INVESTING AND FINANCE (3). Overview of fundamental concepts of personal investing and finance. 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 personal financial management, and related topics. Emphasis on investment decision making and budgeting decisions.

FLBU 482. CENSORSHIP, PROPAGANDA, AND MEDIA BIAS IN SOUTHEAST ASIA AND BEYOND (3). Addresses the question What is the general media landscape like in Southeast Asia? Issues relevant to freedom of expression and cultural production of dissent are addressed. Topics include literature, cartoons, slogans, authoritarian regimes, and social media. Hands-on learning opportunities provide experience in creating digital narratives and interactive contents.

#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 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 information and persuasive purposes. Two hours of lecture, two hours of laboratory.

#GEOG 324X. WOMEN IN SCIENCE (3). *Crosslisted as WGSS 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.

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

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

HDFS 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.

^*HIST 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.

#HIST 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.

^HIST 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.

#HIST 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.

* Available for general education credit.

^ Also a Writing Infused Course.

Fulfills the Human Diversity Requirement.

HIST 364. AFRICAN-AMERICAN HISTORY 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.

HIST 365. AFRICAN-AMERICAN HISTORY 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.

*^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.

^HIST 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.

*HIST 388. THE CUBAN REVOLUTION AND ITS LEGACY (3). History of the Cuban Revolution in the mid-twentieth century and its long-term effects on Latin America, Africa, Southeast Asia, the United States, and Soviet Union. Emphasis on the multiple ways the revolution introduced methods of insurgency and contributions to democratic politics and nation building for countries in the Third World.

IVPA 201. CREATING ART FOR OTHERS (3). Application of foundational skills and tools of music, theatre, dance, and/or visual art. Advancement of artistic growth and the development of process through studio practice. Application of skills and processes to a solicited commission, identification of a community and fulfillment of a need of that community through an artistic project. The project will be assessed by the students via various methods, data gathered and analyzed for the project's impact.

*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.

^LESM 365. COMMUNICATION STRATEGIES IN SPORT (3). Application of communication theories to the sport, exercise, and fitness industries. Examination of public and media relations with a special focus on message development, social media, image building and crisis management for sport, exercise, and fitness organizations.

MGMT 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: Sophomore, junior, or senior standing.

MUHL 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.

NNGO 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.

^NUTR 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.

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.

PHHE 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.

PHIL 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?

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 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.

POLS 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.

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 psychophysiological 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.

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.

*REHB 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.

^ Also a Writing Infused Course.

* Fulfills the Human Diversity Requirement.

REHB 300. PSYCHIATRIC DISABILITY IN SOCIETY (3). Orientation to the field of psychiatric rehabilitation and exploration into the history, philosophy, practice, and current trends related to maximizing psychological, societal, vocational, and economic independence of people with psychiatric disabilities.

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.

SCL 100. FOUNDATION OF SOCIAL CHANGE LEADERSHIP (3). Introduction to the theoretical and philosophical foundations of social change leadership. Attention to ethical decision-making, development of critical self-reflection, and the role of collaboration and social responsibility in promoting social change.

SEEC 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.

***SEVI 205. THE BLINDNESS EXPERIENCE (3).** Exploration of diverse views of blindness, underlying societal factors that influence these views, and adaptations commonly used by people who are blind or have low vision to maximize their independence, health, and wellness in daily life.

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.

SOCI 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.

***WGSS 101. INTRODUCTION TO WOMEN, GENDER, AND SEXUALITY STUDIES (3).** Introduction to the study of women, gender, and sexuality in the contemporary U.S., with an emphasis on diversity, feminisms, LGBTQ+ communities, and social change.

***WGSS 201. GLOBAL GENDER ISSUES (3).** Introduction to how gender, power and sexual orientation influence access to resources globally, as well as gendered experiences and livelihood strategies in different societies around the world.

***WGSS 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.

WGSS 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.

General Education Course Titles

Foundational Studies

COMS 100 - Fundamentals of Oral Communication (3)
ENGL 103 - Rhetoric and Composition I (3)
ENGL 203 - Rhetoric and Composition II, Researched Writing in the Domains (3)
ENGL 204 - Rhetoric and Composition, Accelerated Researched Writing in the Domains (3)
ISYE 335 - Probability and Statistics for Engineers (3)
MATH 101 - Core Competency in Mathematics (3)
MATH 110 - College Algebra (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 (4)
MATH 229 - Calculus I (4)
STAT 100 - Basic Statistics (3)
STAT 300 - Introduction to Probability and Statistics (3)

Knowledge Domain Course Titles

Creativity and Critical Analysis

ANTH 102 - Rise of Civilization (3)
ANTH 210 - Exploring Archaeology (3)
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)
ARTH 294 - Introduction to Arts of Asia (3)
ARTH 340 - Studies in Modern and American Art (3)
ARTH 350 - Studies in Contemporary Art (3)
ARTH 362 - History of Visual Communication (3)
COMS 203 - Interpersonal Communication Skills (3)
COMS 220 - Rhetoric and Public Issues (3)
COMS 230 - Rhetoric and the Media (3)
COMS 356 - Critical Interpretations of Film/Television (3)
COMS 480 - Communication and Conflict Management (3)
ENGL 110 - Literature and Popular Culture (3)
ENGL 115 - British Identities, British Literature (3)
ENGL 116 - American Identities, American Literature (3)
ENGL 117 - Literature of Social Justice (3)
ENGL 310 - Ideas and Ideals in World Literature (3)
ENGL 315 - Readings in Shakespeare (3)
ENGL 340 - The Bible as Literature (3)
ENGL 350 - Writing across the Curriculum (3)
ENGL 361 - Literature of Healthcare (3)
EPFE 321 - History of American Education (3)
EPFE 400 - Foundations of Education (3)
EPFE 410 - Philosophy of Education (3)
EPS 300 - Educational Psychology (3)
EPS 430 - Becoming Adult in Postmodern Contexts (3)
ETT 231 - Digital Visual Literacy for Learning (3)
FLCL 271 - Classical Mythology (3)
FLFR 371 - Masterpieces of French Literature in Translation (3)
FLIT 272 - The Italian Renaissance (3)
FLRU 361 - Russian Culture and Literature (3)
FSMD 262 - Design Trends in Western Costume (3)
HIST 110 - History of the Western World I: Problems in the Human Past (3)
HIST 112 - History of the Western World II: Problems in the Human Past (3)
HIST 140 - Asia to 1500 (3)

* Fulfills the Human Diversity Requirement.

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)
 HIST 260 - American History to 1865 (3)
 HIST 261 - American History since 1865 (3)
 HIST 352 - Popular Culture in Japan (3)
 HIST 369 - Women in United States History (3)
 HIST 383 - Latin America Through Film (3)
 IDSP 225 - Introduction to Medieval Society and Culture (3)
 JOUR 350 - Environment, Health and the Media (3)
 KNPE 393 - Social Aspects of Sport (3)
 LATS 100 - Introduction to Latin American Studies (3)
 LESM 152 - Perspectives in U.S. Sport (3)
 LTRE 190 - College Reading and Study Strategies (3)
 MEE 382 - Design Thinking (3)
 MGMT 227 - Entrepreneurship, Innovation, and Sustainability (3)
 MGMT 311 - Social Entrepreneurship (3)
 MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
 MUHL 220 - Introduction to Western Musical Traditions (3)
 MUHL 221 - Introduction to Jazz Music (3)
 MUHL 222 - World Music and Culture (3)
 PHIL 101 - Introduction to Philosophy (3)
 PHIL 103 - Contemporary Issues in Ethics (3)
 PHIL 105 - Logic and Critical Reasoning (3)
 PHIL 251 - Philosophy of Race (3)
 POLS 150 - Democracy in America (3)
 POLS 251 - Introduction to Political Philosophy (3)
 SESE 320 - Disability in Film (3)
 TH-D 222 - Dance and the Fine Arts (3)
 TH-D 474 - Dance Philosophy and Aesthetics (3)
 THEA 203 - Introduction to Theatre (3)
 THEA 370 - History of Theatre and Drama (3)
 THEA 379 - Perspectives on Creating (3)
 UBUS 110 - Business in Action (3)
 WGSS 202 - Women and Cultural Expression (3)

Nature and Technology

ANTH 103 - The Great Apes (3)
 ANTH 240 - Becoming Human: Discovering Human Origins (3)
 ARTH 331 - Art, Nature and Technology 1400 to 1800 (3)
 BIOS 101 - Plant Products and Human Affairs (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)
 ENV5 210 - Introduction to Sustainable Food Systems (3)
 ETR 450 - Data Analysis for Design and Evaluation (3)
 ETT 234 - Learning with Technology (3)
 GEOG 105 - Weather, Climate, and You (3)
 GEOG 253 - Environment and Society (3)
 GEOL 103 - Planetary and Space Science (3)
 GEOL 104 - Introduction to Ocean Science (3)
 GEOL 105 - Geologic Resources and the Environment (3)
 GEOL 120 - Planet Earth (3)
 GEOL 121 - Planet Earth Laboratory (1)
 GEOL 303 - Diamonds, Gems, and Other Precious Stones (3)
 GEOL 304 - Diamonds, Gems, and Other Precious Stones Laboratory (3)
 HIST 323 - History of Science to Newton (3)
 HIST 377 - American Environmental History (3)
 ILAS 261 - Language, Mind, and Thought (3)
 ISYE 100 - Fundamentals of Manufacturing Systems (3)
 ISYE 250 - Introduction to Lean Systems Engineering (3)
 ISYE 420 - Introduction to Energy Management Systems (3)

KNPE 100 - Scientific Basis of Human Activity (3)
 MEE 101 - Energy and the Environment (3)
 NUTR 201 - Human Nutrition (3)
 OMIS 259 - Introduction to Business Information Systems (3)
 PHIL 205 - Symbolic Logic (3)
 PHYS 150 - Physics (3)
 PHYS 151 - Physics Laboratory (1)
 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)
 PSYC 345 - Cognitive Psychology (3)
 PSYC 481 - Drugs and Behavior (3)
 STAT 200 - Elementary Statistics (4)
 TECH 245 - Pollution Prevention and Sustainable Production (3)
 TECH 294 - Technology and Cultural Relevance (3)

Society and Culture

ANTH 104 - Anthropology of Pop Culture: Making the Familiar Strange (3)
 ANTH 105 - Archaeology Myths and Mysteries (3)
 ANTH 120 - Anthropology and Human Diversity (3)
 ANTH 220 - Introduction to Cultural Anthropology (3)
 ANTH 230 - Introduction to Linguistic Anthropology (3)
 ANTH 302 - Asian American Cultures (3)
 ANTH 465 - Medical Anthropology (3)
 ART 465 - Introduction to Museum Studies (3)
 ARTE 109 - Strategic Visual Thinking (3)
 ARTH 310 - Studies in Ancient Art and Middle Eastern Art (3)
 ARTH 320 - Studies in Medieval Art (3)
 ARTH 330 - Studies in Early Modern Art (3)
 ARTH 360 - Studies in Design (3)
 ARTH 361 - History of Sustainable Design (3)
 ARTH 370 - Studies in Asian Art (3)
 ARTH 380 - Studies in African, Oceanian, Native American, Pre-Columbian, and Latin American Art (3)
 BIOS 324X - Women in Science (3)
 BKST 200 - Racism in American Culture and Society (3)
 BKST 211 - Educating for Cultural Sensitivity (3)
 BKST 219 - Introduction to African Studies (3)
 BKST 300 - Foundations of Black Studies (3)
 BKST 440 - Black Liberation Movements (3)
 COMD 220 - Introduction to Communicative Disorders (3)
 COMS 240 - Rhetoric of Interpersonal Communication (3)
 COMS 362 - Intercultural Communication (3)
 COMS 403 - Freedom of Speech and Communication Ethics (3)
 COMS 410 - Communication and Gender (3)
 ECON 160 - Contemporary Economic Issues (3)
 ECON 186 - Introduction to Environmental Economics (3)
 ECON 260 - Principles of Microeconomics (3)
 ECON 261 - Principles of Macroeconomics (3)
 ENGL 318 - Exploring Human Language (3)
 ENV5 303 - Environment in the Social Sciences and Humanities (3)
 EPFE 201 - Education as an Agent for Change (3)
 EPFE 355 - Sociology of Schooling (3)
 EPFE 440 - Education for Social Justice (3)
 EPS 307 - Development of the Adolescent (3)
 ETR 451 - Community-based and Participatory Action Research (3)
 ETT 211 - Technology in a Diverse Society (3)
 ETT 329 - Learning in the Digital Age (3)
 FINA 315 - Personal Investing and Finance (3)
 FLBU 482 - Censorship, Propaganda, and Media Bias in Southeast Asia and Beyond (3)
 GEOG 202 - World Regional Geography (3)
 GEOG 204 - Geography of Economic Activities (3)
 GEOG 256 - Maps and Mapping (3)
 GEOG 324X - Women in Science (3)
 HDFS 207 - The Consumer (3)
 HDFS 230 - Child Development (3)
 HDFS 280 - Human Development, the Family, and Society (3)
 HIST 343 - History of Southeast Asia since Ca. 1800 (3)

* Fulfills the Human Diversity Requirement.

HIST 349 - African History since 1600 (3)
 HIST 355 - History of Black American Music (3)
 HIST 361 - History of Health and Medicine in the United States (3)
 HIST 364 - African-American History to 1865 (3)
 HIST 365 - African-American History Since 1865 (3)
 HIST 381 - Colonial Latin America (3)
 HIST 382 - Modern Latin America (3)
 HIST 386 - History of Human Rights (3)
 HIST 388 - The Cuban Revolution and Its Legacy (3)
 IVPA 201 - Creating Art for Others (3)
 KNPE 111 - Sport: Culture and Society (3)
 LESM 365 - Communication Strategies in Sport (3)
 MGMT 417 - Leading and Managing Change (3)
 MUHL 431 - Music of Southeast Asia (3)
 NNGO 100 - Community Leadership and Civic Engagement (3)
 NUTR 406 - Global Food and Nutrition Issues (3)
 PHHE 206 - Contemporary Health Concepts (3)
 PHHE 295 - Introduction to Public Health (3)
 PHHE 315 - Introduction to Health Promotion (3)
 PHIL 336 - Biomedical Ethics (3)
 POLS 100 - American Government and Politics (3)
 POLS 210 - Introduction to Law and 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)
 PSYC 245 - Thinking (3)
 REHB 200 - Disability in Society (3)
 REHB 300 - Psychiatric Disability in Society (3)
 SCL 100 - Foundation of Social Change Leadership (3)
 SEAS 225 - Southeast Asia: Crossroads of the World (3)
 SEEC 401 - Play Development of the Young Child (3)
 SEVI 205 - The Blindness Experience (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)
 SOCI 354 - Families and Social Change (3)
 WGSS 101 - Introduction to Women, Gender, and Sexuality Studies (3)
 WGSS 201 - Global Gender Issues (3)
 WGSS 324 - Women in Science (3)
 WGSS 350 - Lesbian, Gay, Bisexual, and Transgender Studies (3)

Pathways

Knowledge Domain requirements may optionally be fulfilled by a set of PLUS Pathways courses. A Pathway is a body of course work drawn from all three Knowledge Domains that examines a theme from different disciplinary perspectives. Courses in a Pathway coalesce around a set of large questions that are central to the Pathway theme. Each course addresses one or more of these questions. Foundational Studies courses cannot be counted towards a Pathway. Transfer courses cannot participate in the Pathways. Courses listed in the Pathways taken prior to Fall 2016 cannot count towards a Pathway Focus.

Students have the option to organize their required general education courses into a Pathway Focus, as long as the Knowledge Domain distributional requirements are fulfilled. To earn a Pathway Focus, students must successfully complete three courses from a single Pathway, one course from each Knowledge Domain. Students are still responsible to take additional Knowledge Domain courses to complete their general education requirements.

Creativity, Innovation, and Change

Creativity and innovation are essential for individuals, societies, economies, and organizations to change, prosper, and grow. This Pathway addresses the inception of creative ideas in individuals as well as how innovation and change is experienced and represented by individuals, groups, families, organizations, and/or societies. In the Pathway courses, students will engage with the topics of creativity, innovation, and change in a variety of disciplines across the university—both in terms of the phenomena and their outcomes. Students will examine different types of creativity and innovation at work in groups, organizations, and the minds of individual thinkers. Finally, they'll develop a better understanding of how change and innovation is enhanced and how it can be inhibited.

Select one of the following Creativity and Critical Analysis courses:

ART 100 - Drawing Foundation I (3)
 ART 102 - 2-D Foundation (3)
 ART 103 - 3-D Foundation (3)
 ARTH 292 - Art and Design since 1900 (3)
 ARTH 340 - Studies in Modern Art (3)
 ARTH 350 - Studies in Contemporary Art (3)
 FSMD 262 - Design Trends in Western Costume (3)
 HIST 352 - Popular Culture in Japan (3)
 #HIST 369 - Women in United States History (3)
 MEE 382 - Design Thinking (3)
 MGMT 227 - Entrepreneurship, Innovation, and Sustainability (3)
 MGMT 311 - Social Entrepreneurship (3)
 MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
 MUHL 221 - Introduction to Jazz Music (3)
 TH-D 222 - Dance and the Fine Arts (3)
 TH-D 474 - Dance Philosophy and Aesthetics (3)
 THEA 203 - Introduction to Theatre (3)

Select one of the following Nature and Technology courses:

ELE 100 - Elements of Electronics (3)
 ISYE 100 - Fundamentals of Manufacturing Systems (3)
 ISYE 250 - Introduction to Lean Systems Engineering (2)
 ISYE 420 - Introduction to Energy Management Systems (3)
 TECH 294 - Technology and Cultural Relevance (3)

Select one of the following Society and Culture courses:

ARTE 109 - Strategic Visual Thinking (3)
 HIST 355 - History of Black American Music (3)
 IVPA 201 - Creating Art for Others (3)
 MGMT 417 - Leading and Managing Change (3)
 SOCI 250 - Contemporary Social Institutions (3)
 SOCI 354 - Families and Social Change (3)

Global Connections

The Global Connections Pathway begins with the premise that the world is interconnected and that understanding its peoples, ideas, resources and systems is of vital importance. Students in the Pathway explore the ways in which the world's cultures interact, and the practices and discourses that have and continue to animate those encounters. The environment itself, its climate and resources are also a valuable part of the Pathway, framing the stage on which humans engage with each other and the natural world. A rich body of work on globalization and its antecedents provides overarching questions across the knowledge domains and help Pathway participants think critically and comparatively about the movement of people, capital, and culture around the world and its impact.

^ Also a Writing Infused Course.

* Fulfills the Human Diversity Requirement.

Select one of the following Creativity and Critical Analysis courses:

ARTH 294 - Introduction to Arts of Asia (3)
 ARTH 362 - History of Visual Communication (3)
 *HIST 140 - Asia to 1500 (3)
 *HIST 141 - Asia since 1500 (3)
 LATS 100 - Introduction to Latin American Studies (3)

Select one of the following Nature and Technology courses:

GEOG 101 - Introduction to Environmental Geography (3)
 GEOL 104 - Introduction to Ocean Science (3)
 MEE 101 - Energy and the Environment (3)
 NUTR 406 - Global Food and Nutrition Issues (3)

Select one of the following Society and Culture courses:

ANTH 220 - Introduction to Cultural Anthropology (3)
 BKST 219 - Introduction to African Studies (3)
 ^ENGL 318 - Exploring Human Language (3)
 FLBU 482 - Censorship, Propaganda, and Media Bias in Southeast Asia and Beyond (3)
 GEOG 204 - Geography of Economic Activities (3)
 HIST 343 - History of Southeast Asia since ca. 1800 (3)
 *HIST 349 - African History since 1600 (3)
 *HIST 382 - Modern Latin America (3)
 HIST 388 - The Cuban Revolution and Its Legacy (3)
 MUHL 431 - Music of Southeast Asia (3)
 POLS 260 - Introduction to Comparative Politics (3)
 SEAS 225 - Southeast Asia: Crossroads of the World (3)

Health and Wellness

Promoting health and wellness allows individuals to improve their lives as well the health of their families and the broader communities within a social context. The Health and Wellness Pathway affords students the opportunity to integrate a broad range of knowledge and skills to promote effective life changes and enhance their well-being, while providing a multidisciplinary base for those who seek careers related to health and wellness. Courses chosen for this Pathway constitute a holistic approach to health and wellness (e.g., physical, environmental, emotional, social, and intellectual). Moreover, this Pathway recognizes that achieving optimal health and wellness is a lifelong and continual process, and that a thorough understanding of the factors that define and determine wellness and improve health is necessary to comprehend the mutual relationship between the mind and the body, take personal and social responsibility for self-improvement, create opportunities for well-being, optimize quality of life, and foster new approaches to address a perpetually changing environment.

Select one of the following Creativity and Critical Analysis courses:

COMS 203 - Interpersonal Communication Skills (3)
 COMS 480 - Communication and Conflict Management (3)
 ENGL 110 - Literature and Popular Culture (3)
 ENGL 361 - Literature of Healthcare (3)
 JOUR 350 - Environment, Health, and the Media (3)
 *KNPE 393 - Social Aspects of Sport (3)

Select one of the following Nature and Technology courses:

BIOS 109 - Human Biology (3)
 KNPE 100 - Scientific Basis of Human Activity (3)
 NUTR 201 - Human Nutrition (3)
 PSYC 481 - Drugs and Behavior (3)

Select one of the following Society and Culture courses:

ANTH 465 - Medical Anthropology (3)
 HDFS 280 - Human Development, the Family, and Society (3)
 *HIST 361 - History of Health and Medicine in the United States (3)
 HIST 386 - History of Human Rights (3)
 *KNPE 111 - Sport: Culture and Society (3)
 LESM 365 - Communication Strategies in Sport (3)

PHHE 206 - Contemporary Health Concepts (3)
 PHHE 295 - Introduction to Public Health (3)
 PHHE 315 - Introduction to Health Promotion (3)
 PHIL 336 - Biomedical Ethics (3)
 POLS 220/PSPA 220X - Introduction to Public Policy (3)
 *SEVI 205 - The Blindness Experience

Learning

The specific processes and circumstances related to learning vary with cultural, historical, sociological and individual factors, making the area of learning a richly diverse and interdisciplinary field with many methodological perspectives, emphases and applications. The study of learning offers applications to personal, societal and professional areas of life. Students learn about the way in which learning is influenced by context, how to improve it, and how to assess its effectiveness. The study of learning also pertains to informed citizenship, which requires development of the ability to use information to think about an issue critically, from multiple perspectives and with an understanding of diverse methodological approaches. Students who in the Learning Pathway will become aware of a framework of understanding that not only encompasses their own disciplines, but begins to include other methodologies into their schema of understanding. This will help students to not only become more flexible in their approaches to problem solving but more accepting of other ideas and conventions of thought. This Pathway intentionally draws from several diverse disciplines to attempt to challenge students' comfort and their methodologies, examining common issues and ideas that appear in several fields, allowing them to see the problem as a multifaceted way as opposed to a two-dimensional object.

Select one of the following Creativity and Critical Analysis courses:

COMS 356 - Critical Interpretation of Film/Television (3)
 EPFE 400 - Foundations of Education (3)
 EPS 300 - Educational Psychology (3)

Select one of the following Nature and Technology courses:

ETR 450 - Data Analysis for Design and Evaluation (3)
 ETT 234 - Learning with Technology (3)
 HIST 323 - History of Science to Newton (3)
 ILAS 261 - Language, Mind, and Thought (3)
 PSYC 345 - Cognitive Psychology (3)

Select one of the following Society and Culture courses:

ANTH 120 - Anthropology and Human Diversity (3)
 ART 465 - Introduction to Museum Studies (3)
 BKST 300 - Foundations of Black Studies (3)
 COMD 220 - Introduction to Communicative Disorders (3)
 EPS 307 - Development of the Adolescent (3)
 ETT 329 - Learning in the Digital Age (3)
 HDFS 230 - Child Development (3)
 PSYC 225 - Lifespan Development: Childhood through Adulthood (3)
 PSYC 245 - Thinking (3)
 SEEC 401 - Play Development of the Young Child (3)

Origins and Influences

The Origins and Influences Pathway considers a timeless question: how has the past shaped the present? By studying this question students will expand their understanding of who we are—as individuals, as members of societies, and as participants in the human condition. This Pathway considers the broader context of human society and culture, the relationship of people to nature and technology, and the broad array of human endeavors in creativity and critical thought. It takes the long view of the human past reaching back to the origins of the planet and the development of humans as a species. At the same time, it looks forward to such contemporary matters as race, gender, and sexuality in modern society. Courses in the Origins and

* Fulfills the Human Diversity Requirement.

Influences Pathway explore the ways in which humans have constructed their economic, social, and political orders, and they give vital attention to the central place of literature, music, and the performing arts in the human experience. Across a wide variety of courses and programs, students will gain diverse perspectives on the multiple ways in which the past has shaped our world.

Select one of the following Creativity and Critical Analysis courses:

ARTH 282 - Introduction to World Art (3)
 ENGL 315 - Readings in Shakespeare (3)
 *EPFE 321 - History of American Education (3)
 FLCL 271 - Classical Mythology (3)
 FLRU 361 - Russian Culture and Literature (3)
 *HIST 170 - World History I: Problems in the Human Past (3)
 IDSP 225 - Introduction to Medieval Society and Culture (3)
 MUHL 220 - Introduction to Western Musical Traditions (3)
 POLS 251 - Introduction to Political Philosophy (3)
 THEA 370 - History of Theatre and Drama I (3)
 *WGSS 202 - Women and Cultural Expression (3)

Select one of the following Nature and Technology courses:

ANTH 240 - Becoming Human: Discovering Human Origins (3)
 ARTH 331 - Art, Nature and Technology 1400 to 1800 (3)
 GEOL 103 - Planetary and Space Science (3)
 GEOL 120 - Planet Earth (3)
 PHYS 162 - Elementary Astronomy (3)

Select one of the following Society and Culture courses:

ANTH 105 - Archaeology Myths and Mysteries
 ARTH 310 - Studies in Ancient and Middle-Eastern Art (3)
 ARTH 330 - Studies in Early Modern European Art (3)
 GEOG 202 - World Regional Geography (3)
 *HIST 364 - African-American History to 1865 (3)
 *HIST 381 - Colonial Latin America (3)

Social Justice and Diversity

The prosperity of a diverse society demands that its citizens be able to contribute to public discourse and policymaking in an educated and thoughtful manner. The Social Justice and Diversity Pathway is designed to do the following: provide students with the necessary skills and knowledge to be prepared for active and responsible engagement in social decision-making; to unite people of different social identities; to create and sustain social and political processes; and to support a just and equitable society. This Pathway recognizes that public issue decisions need to be tied to facts, a fully developed personal sense of social justice, individuals' understanding of their identities and their connection to the larger social context. This Pathway also guides students toward an understanding of the political and economic mechanisms that guide the policy process. The courses chosen for this Pathway address one or more of these elements and were chosen to provide students with a knowledge base that will prepare them for a lifetime of informed engagement in a diverse society. This Pathway provides the opportunity for students to develop the skills, values, and personal understanding to become leaders in our globalized society.

Select one of the following Creativity and Critical Analysis courses:

ENGL 117 - Literature of Social Justice (3)
 EPS 430 - Becoming Adult in Postmodern Contexts (3)
 ETT 231 - Digital Visual Literacy for Learning (3)
 HIST 260 - American History to 1865 (3)

Select one of the following Nature and Technology courses:

ENVS 210 - Introduction to Sustainable Food Systems (3)
 GEOG 253 - Environment and Society (3)

Select one of the following Society and Culture courses:

ANTH 302 - Asian American Cultures (3)
 BKST 200 - Racism in American Culture and Society (3)
 BKST 440 - Black Liberation Movements (3)
 COMS 362 - Intercultural Communication (3)
 COMS 403 - Freedom of Speech and Communication Ethics (3)
 *COMS 410 - Communication and Gender (3)
 *EPFE 440 - Education for Social Justice (3)
 *ETT 211 - Technology in a Diverse Society (3)
 *HIST 365 - African-American History since 1865 (3)
 NNGO 100 - Community Leadership and Civic Engagement (3)
 SCL 100 - Foundation of Social Change Leadership (3).
 SOCI 270 - Social Problems (3)
 *WGSS 101 - Introduction to Women, Gender, and Sexuality Studies (3)
 *WGSS 324/*BIOS 324X/*GEOG 324X - Women in Science (3)
 *WGSS 350 - Lesbian, Gay, Bisexual, and Transgender Studies (3)

Sustainability

Many have defined sustainability as economic development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Others stress the value of social justice with intergenerational equity and respect for the planet and all of its occupants. The Sustainability Pathway investigates both fiscal and environmental sustainability through economic and societal activities. People, technology, and natural processes will be critical elements in achieving more sustainable societies with environmental justice, with both costs and benefits being collective. Sustainability studies are relevant to a wide array of disciplines because sustainable behaviors must flow from knowledgeable, participatory citizens with an intergenerational awareness of the connections, and interdependencies among equitable societies, vital economies, human innovation, and goods and services. This Pathway is designed to equip students with the knowledge and skills necessary to develop sustainable choices over the course of their lives and professional careers.

Select one of the following Creativity and Critical Analysis courses:

ANTH 102 - Rise of Civilization (3)
 COMS 220 - Rhetoric and Public Issues (3)
 HIST 171 - World History II: Problems in the Human Past (3)
 *HIST 261 - American History since 1865 (3)

Select one of the following Nature and Technology courses:

ANTH 103 - The Great Apes (3)
 BIOS 106 - Environmental Biology (3)
 GEOL 101 - Geology of National Parks (3).
 GEOL 105 - Geologic Resources and the Environment (3)
 *HIST 377 - American Environmental History (3)
 TECH 245 - Pollution Prevention and Sustainable Production (3)

Select one of the following Society and Culture courses:

ARTH 360 - Studies in Design (3)
 ARTH 361 - History of Sustainable Design (3)
 *BKST 211 - Educating for Cultural Sensitivity (3)
 ECON 160 - Contemporary Economic Issues (3)
 ENVS 303 - Environment in the Social Sciences and Humanities (3)
 ETR 451 - Community-based and Participatory Action Research (3)
 FINA 315 - Personal Investing and Finance (3)
 HDFS 207 - The Consumer (3)
 POLS 210 - Introduction to Law and Courts (3)

* Fulfills the Human Diversity Requirement.

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 one of the following five options:

Successful completion of one of the following sequences.

American Sign Language: FLSL 101, FLSL 102, FLSL 201, FLSL 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
 Khmer: FLKH 103, FLKH 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 215¹
 Tagalog: FLTA 103, FLTA 104
 Thai: FLTH 103, FLTH 104
 Successful completion of FLST 181 and FLST 182, in the same language.

OR

Completing the equivalent of the fourth-year of a foreign language with no term grade lower than C at an accredited high school.

OR

Demonstrating fluency (speaking, reading, writing, and listening) in a language other than English on the Standards-Based Measurement of Proficiency (STAMP) test administered through the Department of World Languages and Cultures. See "Credit by Examination" section in undergraduate catalog.

OR

Requesting course credit for the State Seal of Biliteracy within 3 academic years after graduating from high school. See "Credit by Examination" section in undergraduate catalog.

OR

Exemption (no credit awarded) by:

¹ With consent of the Department of World Languages and Cultures, native speakers of Spanish may substitute FLSP 215 for any and all levels of FLSP 101 through FLSP 202.

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 World Languages and Cultures.

OR

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

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

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

All engineering and engineering technology students must have their schedule reviewed, approved, and signed by their assigned 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> MyNIU Student Center> Academics> Apply for Graduation> Go. 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 – September 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 February 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 a certification of degree requirements being met. Contact the Office of Registration and Records for details.

Degrees with Distinction

A student must have completed at least 45 semester hours of work at NIU to be eligible for graduation with distinction. Distinction grade point averages are computed on the basis of all NIU courses attempted in the last 45 hours.

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 will graduate with the respective distinction of either "Full University Honors," or "Associate 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 Professional Educator License (PEL). NIU offers initial educator licensure 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 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 program 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.

Licensure Program	Academic Department/School
<i>Early Childhood</i> (birth through grade 2)	Special and Early Education
<i>Elementary (1-6)</i>	Curriculum and Instruction
<i>Middle Level (5-8)</i>	Curriculum and Instruction
<i>Secondary (9-12)</i>	
Biological Science	Biological Sciences
Chemistry	Chemistry and Biochemistry
Earth and Space Science	Geology and Environmental Geosciences
English	English
Environmental Science	Geology and Environmental Geosciences

History	History
Mathematics	Mathematical Sciences
Physics	Physics
Social Science including economics, geography, political science, psychology, and sociology and anthropology	History

<i>Special (K-12)</i>	
Art and Design ¹	Art and Design
French	World Languages and Cultures
German	World Languages and Cultures
Music	Music
Physical Education	Kinesiology and Physical Education
Spanish	Foreign Languages and Literatures

<i>Special Education</i> (Pre-K-age 21)	
Learning Behavior Specialist I	Special and Early Education
Visual Impairments	Special and Early Education

Students who wish to pursue more than one teaching endorsement must complete the NIU program requirements for each endorsement. 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 equivalent, a test of subject matter knowledge administered by the Illinois Licensure Testing System are all required for licensure.

Successful completion of the state mandated Teacher Performance Assessment (edTPA).

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 Endorsement
Elementary Endorsement
High School Endorsement
Special Endorsement License

Each endorsement requires professional education courses. The courses are listed in the department sections of this catalog.

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 faculty and administration of NIU at the time of this publication. Students who need clarity regarding one of these regulations should consult with the advising director of their college or with the Academic Advising Center, if the student has no college affiliation.

Advisement and Registration

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.

Students are responsible for checking with their academic adviser to determine that they will have met all university and departmental requirements by the time they expect to graduate.

College of Business Barsema Hall 201

All College of Business students who have not enrolled in upper-level business courses are advised in the advising office Undergraduate Advising and Student Resources. Once enrolled in upper-level business courses, students are advised in the department in which they have a declared major.

College of Education

Applied Management: Instructional Technology, Training and Evaluation – Gabel Hall 208

Early Childhood Elementary and Special Education – Gabel Hall 161

Elementary Education – Gabel Hall 152

Kinesiology and Physical Education – Anderson Hall 214

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.

College of Engineering and Engineering Technology Engineering Building 331

All students in the College of Engineering and Engineering Technology are advised in the department of their intended or declared major or in the Central Advising Office of the College of Engineering. Students majoring in Electrical, Industrial and Systems, or Mechanical Engineering who have not yet passed MATH 230 with a C or better or Technology students who have not passed MATH 110 with a C or better will be advised by the Central Advising Office. All other students will be advised in the department of their intended or declared majors.

College of Health and Human Sciences Wirtz Hall 227

All students in the College of Health and Human Sciences are initially advised in the college advising office. Some majors will be assigned a program or faculty adviser in their school as juniors or seniors.

College of Liberal Arts and Sciences Zulauf 201

The College of Liberal Arts and Sciences Advising Office advises all students who have declared a major in a department in the College of Liberal Arts and Sciences. College advisers work in parallel with departmental advisers who advise students regarding major courses, curriculum, engaged learning and careers.

College of Visual and Performing Arts Music Building 303

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 Academic Advising Center Building

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 students who are undecided and exploring majors. The Academic Advising Center will not, under any circumstances, initiate or approve exemptions to curricular requirements or requests for waivers to university graduation requirements.

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. Students who are undecided and desire no college affiliation at the time of application, should choose "Undecided-Any College" as their major. 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 is either 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 ensure that these requirements are taken in the appropriate semester.

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 or drop a minor at any time in consultation with an academic adviser in the office of the department (or in some cases, the college) 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 and a listing of course offerings are available in the MyNIU student system. Information is available from the Office of Registration and Records' website at www.reg.niu.edu. Click on "Courses and Registration" for additional information. **NOTE: Students will not receive credit for any course for which the registration was not completed in a timely manner in accordance with university procedures. Further, it is against university policy 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, etc.) will not be allowed to register for classes until all obligations are met and should not expect retroactive enrollment for the 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 focusing on 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 SAS Software – SAS Joint Certificate Program (Department of Operations Management and Information Systems)
- Creative Writing (English)
- Criminology (Sociology)
- Culturally Relevant Teaching (College of Education)
- Digital Marketing (Department of Marketing)
- Digital Media Production (Department of Communication)

- eLearning Design (Department of Educational Technology, Research & Assessment)
- Energy Management (Department of Technology)
- Enterprise Management Using SAP Software (Department of Operations Management and Information Systems)
- Facilities Management (Department of Technology)
- Film and Television Studies (College of Liberal Arts and Sciences)
- Finance (Department of Finance)
- Foundations of Educational Studies (Department of Leadership, Educational Psychology and Foundations)
- Geographic Information Systems (Department of Geographic and Atmospheric 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 and Consumer Sciences)
- Inclusive Teaching Practices (Department of Special and Early Education)
- Infant Toddler Credential Certificate-Level 5 (School of Family and Consumer Sciences)
- Information Systems (Department of Operations Management and Information Systems)
- Leadership in Aging Services (College of Health and Human Sciences)
- 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 Curriculum and Instruction)
- Mobile Programming (Department of Computer Science)
- Nanotechnology (College of Engineering and Engineering Technology)
- Nonprofit and NGO Studies (Center for Nonprofit and NGO Studies)
- Philosophy of Education (Department of Leadership, Educational Psychology and Foundations)
- Professional Selling (Department of Marketing)
- Public Service Leadership (Departments of Political Science and Public Administration)
- Religious Studies (College of Liberal Arts and Sciences)
- Retail Management (Department of Marketing)
- Social Entrepreneurship (Department of Management)
- Sustainable Food Systems (Environmental Studies)
- Women's and Gender Studies (College of Liberal Arts and Sciences)
- Young Children with Disabilities Studies (Department of Special and Early Education)

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 and Scholarship Office regarding the impact of schedule changes on 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 Housing and Residential Office. Reducing hours can also impact student insurance. Contact Student Health Insurance for additional information. Student-athletes should contact Student-Athlete Academic Support Services (SAASS).

See chart and detailed procedures below including the Undergraduate Academic Calendar for appropriate deadlines for adding/dropping a course(s) and for withdrawals. Other deadlines may apply for 14-week, summer, and dynamic (non-standard) courses. Students should 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
Drop all courses	Prior to the first day of class	Self-service MyNIU
Add a course	Week 1	Self-service MyNIU
Add a course	Week 2	Contact department of Course
Drop a course	Week 1	Self-service MyNIU
Drop a course	Week 2	Contact major college or Academic Advising Center
Withdraw from a course	Week 3 through end of Week 8	Contact major college or Academic Advising Center
Withdraw from the university	Week 1 through end of Week 8	Contact major college or Academic Advising Center
Withdraw 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
Drop all courses	Prior to the first day of semester	Self-service MyNIU
Add a course	Week 1 of session	Self-service MyNIU
Drop a course	Week 1 of Session	Self-service MyNIU
Withdraw from a first-half course	Week 3 of session through end of Week 4 of session	Contact Major College or Academic Advising Center
Withdraw from a second-half course	Week 2 of session through end of Week 4 of session	Contact Major College or Academic Advising Center
Withdraw from the university	Week 1 of session through end of Week 4 of session	Contact Major College or Academic Advising Center
Withdraw from the university	Week 5 of session through week 6 of session (with academic jeopardy)	Contact Major College or Academic Advising Center

Add or Drop 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 the semester through MyNIU. Courses may be dropped during the second week of the term with permission of the student's major college, or the Academic Advising Center for students with no major college affiliation. Courses may be added to a student's schedule during the second week of the term with permission of the department offering the course. 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. Students should refer to MyNIU for course specific deadlines.

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 to withdraw from a course must be initiated and processed through the central advising 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 academic college or Academic Advising Center identified on the application for admission.

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 student's 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 www.niu.edu/academicaaffairs/withdrawals.

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 the central advising 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: a 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 the time of withdrawal, 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: a 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 the time of withdrawal, 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.

Withdrawal from the University for Violation of Student Conduct

In each case for which an Administrative Hearing Officer, a Student Conduct Board, Residence Hall Conduct Board, or Organizational Conduct Board determines that a student has violated the *Student Code of Conduct*, the sanction(s) shall be determined and imposed by the appropriate Administrative Hearing Officer or Conduct Board. A student who has received a sanction of either University Suspension or University Expulsion retains the right to appeal the University Suspension or University Expulsion. If the student chooses not to appeal within five (5) business days of being notified of the sanction, they will be withdrawn from all enrolled courses immediately. If the sanction is upheld upon appeal, the student will be withdrawn from all enrolled courses effective the date of the initial sanction. If the sanction is overturned upon appeal, reasonable attempts will be made by faculty members to allow the student to make up missed work. The student should consult with the major college advising office, or the Academic Advising Center if the student has no college affiliation, regarding any future enrollment.

A university withdrawal processed up to the end of the 8th week of the semester for 16-week courses will be made without academic jeopardy and is initiated by the Office of Registration and Records.

A university withdrawal processed after the 8th week of the semester for 16-week courses will be made with academic jeopardy enforced and is initiated by the major college office: a 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 the time of withdrawal, a grade of F will be recorded and included in both the term and cumulative GPA.

Refer to the chart and detailed procedures in the Schedule Changes section above for additional information regarding deadlines to withdraw. Other deadlines may apply for 14-week, summer, and dynamic (non-standard) courses. Refer to MyNIU for course specific deadlines.

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

It should be noted that minimum GPA requirements are interpreted *exactly*, without rounding.

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. All incompletes must be cleared before a degree will be awarded.

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 grades are posted, 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 an allegedly capricious grade only. This is not for the review or the judgement of an instructor in assessing the quality of a student's work. The policy for appealing allegedly capricious grades can be found at <https://www.niu.edu/academicaffairs/apm/III7.shtml>. For further information and advice regarding the procedure for appealing an allegedly capricious grade, please contact the University Ombudsperson <https://www.niu.edu/ombuds/>.

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. For repeated courses from other institutions, see the section "Repeated Courses in Transfer" below.

A student may repeat any course once in which a grade of D or F was received. Third or subsequent enrollments (repeats) in a course may be allowed only if students first obtain permission from their major college or Academic Advising Center for students with no college affiliation, then subsequently obtain permission from the department offering the course. The highest grade which the student earns will be used in the GPA calculation, but all grades will always appear on the student's official transcript. In all cases, the permanent record of a student repeating a course will reflect each enrollment in the course. (A course withdrawal does not count as a repeat.) Credit may be earned only once unless the course description in the catalog states otherwise.

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.

Change of Grade

Final grades, once posted in MyNIU, cannot be changed without a written request for the change of grade authorized 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 term 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 Academic Advising Center.

Students on academic probation, must attain a 2.00 cumulative NIU GPA by the end of next term of enrollment. Students who do not attain the cumulative NIU GPA of a 2.00 by the end of the next term of enrollment will become candidates for academic dismissal.

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 term. 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), International Baccalaureate (IB), Standards-Based Measurement of Proficiency (STAMP) for language proficiency, the Illinois State Seal of Biliteracy, 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 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. For information on the required scores and specific course credit awarded visit <https://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. For information on the examinations, required scores, and specific course credit awarded visit <https://www.niu.edu/testing>.

International Baccalaureate (IB)

The International Baccalaureate (IB) Program offers a series of rigorous, two-year high school courses leading to internationally prepared examinations at the conclusion of the program. Students with sufficiently high scores on certain IB examinations may be eligible for NIU course credit. Go to https://www.niu.edu/testing/_pdf/cbe_brochure.pdf for more specific course information.

Standards-Based Measurement of Proficiency

The Standards-Based Measurement of Proficiency (STAMP) test administered by the Department of World Languages and Cultures assesses fluency (speaking, reading, writing and listening) in a variety of languages other than English. Up to 12 semester hours may be earned by students who are assessed at "Advanced Low Level" on the STAMP test. If fewer than 12 semester hours were earned through an Advanced Placement (AP) test, the STAMP test may be taken to attempt to increase the combined semester hour total (AP and STAMP) for one language to 12 semester hours. Complete lists of languages assessed by STAMP or information regarding STAMP test schedules can be obtained by contacting the Department of World Languages and Cultures at 815-753-1501 or via the Internet at www.niu.edu/celebrate-bilingualism. Visit www.niu.edu/testing for more specific information.

The State Seal of Bilingualism

NIU accepts the State Seal of Bilingualism. Students must request course credit for their seal within three academic years after graduating from high school. Contact the Department of World Languages and Cultures, Watson Hall 111, 815-753-1501 for information.

NIU Proficiency Examinations

Credit for all 100- and 200-level general education courses except COMS 100, ENGL 103, ENGL 203, 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 203 may be earned through Advanced Placement, but not through the Writing Foundational Studies Examination. Passing a foundational studies examination fulfills the foundational studies 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.

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 foundational studies 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).

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 at that institution; 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*. Credit will be awarded at the level recommended by the American Council on Education (ACE). At a minimum, credit will be awarded as elective, although certain courses may be accepted as satisfying major departmental elective or required courses based on the evaluation by and recommendation of the academic unit. 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 colleges should check with their community college counselor about credit transfer to NIU. Illinois public community college counselors have access to the *NIU Articulation Tables* on the Transfer Center web page: www.niu.edu/admissions/transfer/credits.shtml. The *NIU Articulation Tables* give 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, regrec@niu.edu.

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.

Reverse Transfer Credit Policy

Reverse Transfer is a program designed for students who transferred from select Illinois community colleges to NIU without earning their associate's degree. Credits successfully completed at NIU may be transferred back to the community college and used to fulfill remaining requirements for the associate's degree. The community college will evaluate the NIU work and determine if credits taken at NIU will fulfill any remaining requirements. Visit <https://niu.edu/registration-records/transfer/reverse.shtml> for a list of participating Illinois community colleges.

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

In those situations where a student has repeated a course for which a grade below a C was previously earned, only the highest grade will be utilized for transfer credit. Once a student earns a grade of C or better in a course, subsequent attempts will not count for transfer credit, unless the transfer course is repeatable for credit as stated above.

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, even if a higher grade was earned for the transfer course.

For any course in which a student's transcript indicates 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 Academic Advising Center 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 fulfilling 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).

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. Exceptions to these limitations may be granted to students to take courses in the department administering an accelerated degree program.

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.") Exceptions to these limitations may be granted to students to take courses in the department administering an accelerated degree program.

Undergraduates in Law Courses

Undergraduates who have matriculated in the College of Law pursuant to an approved accelerated program may receive undergraduate credit for up to 30 hours of academic credit towards their baccalaureate degrees for courses taken in the College of Law as provided by the applicable accelerated program. Law courses may not be counted for credit towards a baccalaureate degree except as so provided. Under no circumstances may more than 30 hours of law courses be applied towards the baccalaureate degrees.

Graduate Students in Undergraduate Courses

Graduate students and students-at-large may enroll in undergraduate courses. Students admitted with undergraduate deficiencies are encouraged to remove these deficiencies at the earliest possible date in their course of study. Tuition for such classes is charged at the same rate as for graduate-level classes.

While undergraduate course grades are not included in the GPA, they are a part of the permanent record of the graduate student or student-at-large and appear on the transcript. However, no quality points are assigned to the course. Consequently, graduate students, who plan to pursue licensing or certification by external bodies, should carefully consider the ramifications of completing undergraduate courses to fulfill requirements.

Undergraduate hours are included in the calculation of academic load by the university but not by the Department of Education, which establishes regulations for award of federal financial aid. Graduate students and students-at-large, therefore, should understand the potential ramifications on their financial aid before enrolling in undergraduate classes. 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. A leave of absence will be granted for temporary military duty to any student who is a member of the Illinois National Guard, the Illinois Naval Militia, or the reserve components of the Armed Forces called for Limited Training and/or Emergency Call-Up. 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. To initiate a leave of absence, students should contact their College Dean's office, or the Academic Advising Center 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 military duties, or 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. If an accommodation that is satisfactory to both the student and the faculty member that allows the student to make up missed work cannot be agreed upon, the student may appeal to the department chair. If a satisfactory resolution cannot be reached between the student and the chair, the student may appeal to the College Dean, whose decision will be final. Students are responsible for completing the work assigned and/or due on the days they are absent for military or 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 DRC, 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, in addition to university 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 local 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 is charged for each transcript. Visit <https://niu.edu/registration-records/transcripts/index.shtml> for additional transcript options.

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 Student Conduct shall receive a copy of the Academic Misconduct Incident Report indicating final disposition of the case, which will be placed in the conduct file of the student. 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 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 Coverage

The General Fee is assessed to all undergraduate students taking courses at our main campus in DeKalb. Allocations from this fee support: classroom buildings and other campus facilities, comprehensive ambulatory health care for students while the university is in session, services and privileges such as use of gymnasium facilities, admission to athletic events, concerts, films, dramatic productions, lectures, and speeches.

Academic Program Enhancement Fee is assessed to all undergraduate students at all campus locations. Revenues from this fee provide funding for cutting edge academic programs, library journals and books, support for courses in high demand, and technology upgrades.

Student-to-Student Program fee is assessed to all undergraduate students who register for 12 or more on-campus semester credit hours of instruction. It supports a needs-based Financial Aid fund for undergraduate students. Students may opt out of this fee by completing the Fee Refund Request Form located in the Financial Aid Office. Students who opt out of the fee are ineligible for considerations of awards supported by the program.

See *Tuition, Fees, and Surcharges as listed on the Office of the Bursar web site: <http://www.niu.edu/bursar/>*.

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.

Apostille fee: \$10.00
 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
 Lost identification card (after the first is issued): \$25.00
 Replacement of damaged or broken card (must bring card to the OneCard office): \$5.00
 Transcript fee: \$8.00

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 2019-2020 academic year range from \$4,892 per semester for a double occupancy room to \$6,828 per semester for a single mini-suite. All resident hall options include the Huskie Classic Meal Plan. Students can optionally upgrade to the Huskie Block Meal Plan.

Specific questions about our room and board rates can be found at niu.edu/housing or by calling Housing and Residential Services during regular business hours Monday through Friday, 8:00 a.m. to 4:30 p.m. at 815-753-1525.

Refund Policies¹

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 fee, material fees, academic program enhancement fee, 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% 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% 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.

¹ 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.

Part or all of a student's tuition and fees may be refunded because of a student's death, disability, extreme hardship, or being called to active military service. 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 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 being called to active military service, 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 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, 8:00 a.m. to 4:30 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 balance 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

Beginning Fall 2018 domestic students (including permanent residents, undocumented and select visa holding students) will be charged the same tuition rate, regardless of their state of U.S.

residency. However, residency will still need to be determined for institutional reporting, financial aid purposes and a variety of other needs.

Students who take 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 a reconsideration of residence status.

The written claim must be filed within 30 calendar days from the date of assessment of tuition, or the first class day of the term for which tuition is payable, whichever is later, or the student loses all right to a change of status and adjustment of the tuition assessed for the term in question.

The following is based on 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. Students 18 years of age and over are considered residents for tuition purposes, if they have been bona fide residents of the state for at least six consecutive months preceding the first class day of the term and continue to maintain that residence. An adult student whose parents are Illinois residents and who lives with them or elsewhere in the state also will be regarded as a resident.

Minor students. The residence of a student under 18 years of age is considered to be and follow that of the 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. A person who is not a citizen of the United States of America may establish resident status unless the person holds a visa which precludes intent to permanently reside in the United States. Non-citizens may commence establishment of residency with notification of permanent residency status by the United States Immigration and Naturalization Service provided the person meets and complies with all the applicable requirements of these regulations. 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

Financial Aid and Scholarship Office

The Financial Aid and Scholarship Office is responsible for administering and coordinating aid funds from federal, state, private, and university sources. The primary goal of the Financial Aid and Scholarship Office 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 by e-mailing finaid@niu.edu.

The Financial Aid and Scholarship Office's 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 www.niu.edu/financial-aid.

Eligibility Requirements and General Application Procedures

In general, to be eligible for state or federal grants or student loans, a student must:

- be a citizen or permanent resident of the United States or other eligible non-citizen.

- be enrolled at least half time (6 or more graded undergraduate semester hours at NIU) and admitted to a degree-seeking program. (Some programs are available to students enrolled in fewer than 6 semester hours.)

- not be in default on a Federal Perkins Loan, Federal Direct Loan, Federal PLUS (Parent Loan) for Undergraduate Students, or Federal Grad Plus Loan.

- not owe a repayment to a grant program.

- be making satisfactory academic progress per federal financial aid regulations.

- agree to use any student financial aid received solely for educational expenses.

- begin attendance in all courses for which aid is received.

For full list of eligibility criteria, see www.niu.edu/financial-aid.

To apply for federal/state 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 1-334-523-2691. 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 using the FAFSA.

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 preceding 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 must request consideration for summer aid.

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). The exact amount to be repaid to financial aid programs 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. See the Financial Aid and Scholarships website for more information on the return of Title IV.

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/financial-aid.

Federal and state financial aid programs covered by this policy include: 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, other grants as well as the Illinois State Monetary Award Program (MAP), the Federal Direct PLUS Loan, and some 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.

If a student repeats a course, only the best grade of all attempts 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 if the change in major resulted in the student exceeding maximum time frame. 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. Pursuit of a second bachelor's degree will also 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 not meeting pace or GPA standards and who attends without receiving financial aid can regain financial aid eligibility for future terms 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 Financial Aid and Scholarship Office based on unanticipated extenuating circumstances. The Financial Aid and Scholarship Office considers federal regulations and guidance, the student's written appeal, and other documentation when making a final determination. Deadlines for appeal are published on niu.edu/financial-aid/about/policies.shtml.

The following reasons are examples of extenuating circumstances:

- injury or serious illness
- death of relative

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

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

The appeal must explain why the student failed to make satisfactory progress and what has changed that will allow progress for future semesters. The appeal decisions of the Financial Aid and Scholarship Office are final and cannot be overturned by the U.S. Department of Education. All extenuating circumstances must be documented.

The official Satisfactory Academic Progress Policy and Procedures published on the Financial Aid and Scholarship website are 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 Direct Loan. Direct Subsidized Loans are loans made to eligible undergraduate students who demonstrate *financial need* to help cover the costs of higher education at a college or career school. Direct Unsubsidized Loans are loans made to eligible undergraduate, graduate, and professional students, but in this case, the student does not have to demonstrate financial need to be eligible for the loan.

Federal Direct PLUS for parents. The link for the online PLUS application is available on the Financial Aid and Scholarship Office 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. Students must have a zero EFC and be a Pell recipient.

Veterans Assistance. The Military and Post Traditional 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 and notify Military and Post Traditional Student Services of all changes in enrollment. The NIU Enrollment Certification Form can be found on-line at <http://www.niu.edu/mptss>. Inquiries concerning educational benefits for veterans and their dependents may be directed to the Military Student Services, Northern Illinois University, Campus Life Building, Room 240, DeKalb, Illinois 60115, 815-753-0691 or online at <http://www.niu.edu/mptss>. Office hours are 8:30 a.m. - 4:30 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 person who is actively serving in the Army or Air National Guard, or Illinois Naval Militia may qualify for financial assistance benefits. Students should contact the Illinois Student Assistance Commission for information and deadlines.

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. Students should contact the Illinois Student Assistance Commission for information and deadlines.

Illinois Special Education Tuition Waiver, Minority Teachers of Illinois Scholarship Program, Golden Apple Scholars of Illinois, MIA/POW Scholarships. Program and eligibility information available at ISAC.org.

Institutional Aid

Northern Illinois University offers competitive merit scholarships as well as need-based awards. Merit scholarships are offered at the time of admission to first-time incoming freshman or transfer students who meet the academic credentials, citizenship requirements and priority deadlines. Most merit scholarships are renewable, provided the student maintains full-time enrollment and the required minimum cumulative grade point average (terms and conditions will be issued at the time the award is made). Many academic colleges or departments, as well as student service offices, offer competitive scholarship opportunities, most of which are funded by generous donors to NIU. Application requirements, deadlines, access to the on-line scholarship application system, and other scholarship resources can be found through the Financial Aid and Scholarship website at niu.edu/financial-aid/scholarships or on other departmental websites.

Need-based awards are made based upon information submitted in the FAFSA, sometimes in conjunction with academic credentials, and may be subject to available funding.

Private/External Scholarships

Private scholarships are awards provided by donors outside the university such as civic, fraternal, professional, educational, and religious groups/organizations, private foundations, corporations, and employers of parents. The Financial Aid and Scholarship 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 Financial Aid and Scholarship Office. The Financial Aid and Scholarship Office administers the disbursement to students of scholarship funds provided by private/external donors.

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 Financial Aid and Scholarship Office at 815-753-1395 or visit our website at www.niu.edu/financial-aid.

University Services

Holmes Student Center

The Holmes Student Center located in the heart of NIU's campus, offers lounge space, food options, and meeting rooms for students, student organizations, and the NIU community. It features the Duke Ellington Ballroom and Carl Sandburg auditorium and is the largest venue on campus for student events, meetings, and conferences. Wi-Fi is available throughout the building and an ATM machine is located on the main floor.

The Hotel at Holmes, with over 70 guest rooms, is the ideal place for family, friends, and visitors of the NIU campus and community to stay. It is also home to the Huskies Den, providing bowling, billiards, arcade games, and electronic gaming and Huskie Books and Gear, selling NIU spirit wear, school and art supplies, books, and textbooks.

Housing and 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; additionally, utilities are covered within the residence hall contract (including cable TV, Internet, heat, gas, water, garbage, and electricity). Each residence hall has computer workstations available to meet the needs of students. Lobbies and common areas are equipped with wireless Internet, and students can access an 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, photocopiers, and easy access to the Huskie Bus Line.

Residence hall contracts also include an unlimited meal plan. Residents can choose to eat in any of the four dining units in the halls. Dining hours and menus can be found on the Dining website at go.niu.edu/eat.

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 and Special Interest Communities. These specialized communities are 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 Living-Learning Communities and Special Interest Communities: ACES House (Academic and Career Exploratory Scholars), Business Careers House, Esports Community, Fine Arts House, Health Professions House, Honors House, TEACH House, Foreign Language Residence Program, LGBTQA Community, ROTC House, Science, Technology, Engineering and Math Careers House, Sport, Recreation and Wellness Community, and Transfer House.

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 niu.edu/housing and at the Housing Office located in Neptune East 101. Housing and Residential Services can be reached at 815-753-1525 or by e-mail at housing@niu.edu.

Health Services

The university partners with Northwestern Medicine, which operates and runs the on campus clinic. Health Services offers a wide variety of high quality, out-patient health care services to NIU students to assist with maintaining and improving their health. Health Services is available to all students who have been assessed on-campus student fees. There are no charges for physician or provider services, X-rays, most laboratory tests, and many other services. There are charges for medications, immunizations, specialized medical procedures and supplies, selected laboratory tests, and missed appointments. Health Services accepts most health insurance, including Student Health Insurance. Students may use Health Services without being enrolled in the university's Student Health Insurance Plan.

Student Health Insurance

Students who register for 9 or more on campus semester hours by the 10th academic day of the semester are automatically assessed the fee for student health insurance on their tuition account through the Bursar's Office. The student health insurance plan provides coverage for hospitalization and/or medical treatment for injury and sicknesses 24 hours a day anywhere in the world. It is compliant with the Affordable Care Act.

Students who have been assessed the student health insurance fee and have comparable health insurance coverage may apply for a waiver by completing the on-line Waiver Process at www.niu.edu/shi on or before the 10th academic day of the semester. Student who successfully complete the waiver process are not assessed the student health insurance fee or covered by student health insurance for the following spring semester.

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

Students who are insured for the spring semester, are automatically covered through the summer whether or not they enroll in the summer session.

Information concerning the student health insurance may be obtained from the Student Health Insurance office, Health Services, Room 101, 815-753-0122 or email 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 Resource Center

NIU's Asian American Resource 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 and their persistence to graduation. 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 Transportation

NIU maintains the largest student-run university bus system in Illinois. The 17-route system, governed by the director of Mass Transit and the Student Association Mass Transit Board, 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. Most Huskie buses are equipped with chair lifts to provide 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 NIU Department of Police and Public Safety, the director of Mass Transit oversees Huskie Safe Line, which provides safe passage for students to their DeKalb-area homes. The service operates seven nights a week from 11 p.m. to 5:30 a.m. and can be reached at 815-753-2222.

Through the director of Mass Transit and the Disability Resource Center, the NIU Student Association operates the Freedom Mobile, 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.

Career Services

Career Services helps students identify secure internships and full-time employment through a centralized department serving all academic programs. Career Services helps students connect their majors to careers. Drop-in services are available Mondays through Fridays, from 10 a.m. until 3 p.m., to help students with creating resumes and cover letters to connecting with employers.

In addition to supporting students in discovering their career paths, Career Services offers a range of resources and services to guide students at each stage of their career preparation, including the following services:

- Help with career decision making including a website for majors, with corresponding career options, at What Can I Do with My Major? (link to <http://www.careerservices.niu.edu/careerservices/career-resources/what-you-can-do.shtml>)

- Online postings for internships and full-time positions through the Huskie Get Hired system at www.gethired.niu.edu

- Drop-in and online resume and cover letter reviews

- Career testing

- University-wide career fairs

- Networking for students with employers

- Practice Interviews

Career Services staff members also assist students in their searches for internships, off-campus part-time and full-time employment. Visit our website at CareerServices.niu.edu.

Career Services is located in the Campus Life Building, Room 220, and is open Monday-Friday from 8:00 a.m. to 4:30 p.m. More information about Career Services may be obtained online at www.niu.edu/careerservices or by calling 815-753-1642.

Child Development and Family Center

Child Development and Family Center offers NIU students, faculty, and staff full- and part-time expanded child care for children ages 3 months - 5 years. This center is accredited by the National Association for the Education of Young Children, and has a Gold rating through ExceleRate Illinois, which serves as an indicator of a high-quality program. The center is staffed with qualified teachers along with student workers, graduate students and students participating in their practicum experience. 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. Our preschool program is open to the community, no NIU affiliation needed. For more information, please call 815-753-0125 or visit www.niu.edu/ccf/.

Counseling and Consultation Services

Counseling and Consultation Services provides comprehensive mental health support for currently enrolled students at Northern Illinois University. As a department in the Division of Student Affairs, CCS is the designated campus counseling center for NIU students. We are a team of trained professionals committed to improving the mental health of students as they work to achieve their academic and personal goals.

Services include:

- Individual and Group Counseling
- Crisis Intervention and referral
- Substance Use Intervention and education programs
- Anger Workshops
- Advocacy and Referral 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/counseling, or call 815-753-1206.

Disability Resource Center

The Disability Resource Center has been designated by the university to determine appropriate disability accommodations for NIU students in consultation with several entities. Decisions for accommodations are based on the student's clarification about specific needs and barriers to success as well as past history, and documentation as needed from a qualified care provider.

Students who are seeking resources to learn about campus access or to request reasonable accommodations related to academic or residential concerns, should contact the Disability Resource Center on the fourth floor of the Health Services Building. Staff at the DRC may be reached at: 815-753-1303; email: drc@niu.edu; or visit the website at www.niu.edu/disability.

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.

Gender and Sexuality Resource Center

The Gender and Sexuality Resource Center (GSRC) acknowledges the historical impacts of women and lesbian, gay, bisexual, transgender and/or queer (LGBTQ+) identities and provides a home away from home for **all** persons, inclusive of sexual and gender identities, and all forms of masculinity and femininity.

The GSRC serves as a central location for resources and support where acceptance of intersectional identities is encouraged and celebrated. Through student leadership development, advocacy, campus and academic engagement, and professional development opportunities, we collaborate with community, state, and national partners, alumni and other stakeholders to challenge societal constructs of gender and sexuality norms and promote social justice. The center offers a relaxing place to meet people, study, research, and get connected with supportive staff and peers. A lending library of books, films, and magazines on a range of gender and sexuality topics, computer stations for student use, and a variety of free brochures and handouts are available. Internships at the undergraduate and graduate levels are available.

Information Technology

AnywhereApps provides course-specific software for desktops and mobile devices, free of charge to students. AnywherePrints makes printing, copying, and scanning available at locations throughout campus. Students submit print jobs from anywhere they have an internet connection and retrieve them at a campus printer of their choice.

Currently enrolled students have a free subscription to Microsoft Office 365 and the full Microsoft Office suite including Microsoft Word, Excel, PowerPoint and more. The software can be installed

multiple times on desktops, laptops, tablets, and smartphones. Statistical analysis packages such as SAS and SPSS and some curriculum-specific software are also available in all labs.

NIU offers wired data connections to all buildings on all campuses and wireless coverage on the DeKalb campus for both authenticated and guest users.

NIU students have access to computers for research, instruction, and individual use in academic departments, classrooms, and student computing labs. Depending on the department and the location, labs contain both Windows and Macintosh computers and many offer adaptive technologies for students with disabilities.

The Division of Information Technology (DoIT) Service Desk offers support for NIU's network and student systems and is available 24/7/365 at it.niu.edu or 815-753-8100. The Technology Support Desk on the first floor of Founders Library provides walk-in assistance for computer virus removal, laptop and smartphone problems, password issues, email and enterprise application support, and many other technology-related questions.

For more information, visit DoIT.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), Adela de la Torre Honor Society (ATHS), Latino graduation ceremony, and Mentoring and Engaging thru Academic Success (METAS). 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 LRC houses a top-of-the-line computer laboratory (serving as an Anywhere printing site), wireless Internet connections, library, and meeting rooms for student use. For more information, visit www.niu.edu/lrc or contact the center at 815-753-1986.

Military and Post-Traditional Student Services

In October 2015, the offices of Military Student Services (MSS) and Off-Campus and Non-Traditional Student Services (OCNTSS) merged to create Military and Post-Traditional Student Services (MPTSS). Military and Post-Traditional Student Services is designed to support and enhance the educational, interpersonal, and social experiences of veteran, off-campus, commuter, transfer, and non-traditional students. The office aims to help support students on the path to graduation by providing educational and social programmatic support, individual and collective advocacy, and, in the case of veterans, processing federal and state benefits for those who served and their dependents. The office also has a lounge in the basement of the Holmes Student Center 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. For more information about MPTSS visit <http://www.niu.edu/mptss>, call 815.753.9999/0691, or stop by Holmes Student Center 023K or Campus Life Building 240.

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 Engagement and Experiential Learning

The Office of Student Engagement and Experiential Learning (OSEEL) provides undergraduate students with opportunities to engage in hands-on learning leading to the development of vital skills in critical thinking, communication, and decision-making. The OSEEL focuses on three areas: undergraduate research, service learning and engagement conferences. Research opportunities include Research Rookies, Student Engagement Fund, Undergraduate Special Opportunities in Artistry and Research, the Summer Research Opportunities Program and the Research, Engagement and Academic Diversity Grant. Service learning initiatives include Huskie Service Scholars, Huskie Alternative Breaks and the Service Learning Faculty Fellows Program. Engagement conferences include Undergraduate Research and Artistry Day, the Community Engagement Showcase, the Summer Research Symposium and the Undergraduate Student Engagement Travel grant. For more information about the OSEEL programs and initiatives, visit www.oseel.niu.edu/engagedlearning/.

Engage PLUS is also a program housed in OSEEL. Engage PLUS, part of the NIU PLUS program and provides students with an opportunity to earn transcript notation for rigorous experiences in the following categories: artistry, career related work experiences, experiential learning, leadership, service learning, and undergraduate research. To learn more go to www.niu.edu/plus.

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.

Orientation and Enrollment

An orientation program is required of all new undergraduate students (first-year, 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 and Online 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, in the Duramad Building, 121 Normal Road, located on the corner of Normal Road and Lincoln Terrace at 815-753-1045.

Fifteen-minute loading and unloading spaces are located throughout campus and require no special identification other than the use of the vehicle's emergency flashers.

Recreation Services

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, the Outdoor Recreation Sports Complex, and New Hall and Gilbert Hall Fitness Rooms 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
- Outdoor basketball courts
- Natural and artificial sports fields to accommodate: softball, baseball, flag football, lacrosse, soccer, ultimate Frisbee, and Quidditch.

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.
- 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.

31 sports clubs which practices and competes against other universities.

Aquatics--swimming lessons, stroke clinics, and lifeguard certification classes are offered.

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/.

Students' Legal Assistance Office

Two Illinois attorneys and their staff provide legal information, court representation, 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 office is located in the Campus Life Building, Room 120, and can be reached by calling 815-753-1701, or by visiting www.niu.edu/legal and filling out the online intake form.

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.

Other Campus Human Service Agencies

The School of Family and Consumer Sciences **Child Development and Family Center** (CDFC) (Gabel Hall, Rooms 169-170, 815-753-1150) is accredited by the National Association for the Education of Young Children and is recognized by ExceleRate Illinois as a Gold Circle center, the highest level of quality. The CDFC provides high quality child care programs for children ages 8 weeks to 6 years. Enrollment in all programs is open to the university and DeKalb communities, with full-day enrollment 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 44 children, and is a research and training facility for child development majors sponsored by the School of Family and Consumer Sciences. For more information, contact the Child Development and Family Center.

The **Community Counseling Training Center** (Graham Hall 416; 815-753-9312) is a counseling and training clinic, providing free counseling services to children, adults, couples, and families of NIU and the surrounding communities. Counselors are advanced graduate counselors-in-training working under the supervision of NIU Counseling Faculty, who are Counselor Educators and Licensed Clinical Professional Counselors, Licensed Professional Counselors, or Professional Educator Licensed 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, couples counseling, family counseling, group counseling, and psychoeducational and career counseling. To request counseling services, you can visit their office or the Community Counseling Training Center website.

The **Couple and Family Therapy Clinic** (Wirtz Hall, Room 161, 815-753-1684) provides counseling for couples, families, children, and individuals to those affiliated with NIU and residents who live in the surrounding communities of Northern Illinois. The therapists are graduate student therapists 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 Commission on Accreditation for Marriage and Family Therapy Education. The facility and program are part of the School of Family and Consumer Sciences in the college of Health and Human Sciences.

The **Physical Therapy Clinic** (Family Health, Wellness and Literacy Center, 3100 Sycamore Road, 815-752-2675, ptc@niu.edu) offers a comprehensive program of evaluation and treatment for individuals with acute and chronic musculoskeletal conditions and balance/dizziness assessments and treatment. The clinic is a program of the School of Allied Health and Communicative Disorders and accepts most insurance plans.

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, slhc@niu.edu) offers a comprehensive program of evaluation and treatment for individuals with a hearing concern, tinnitus, dizziness/balance or concussion-related issues, as well as speech, language, cognitive communication and swallowing disorders. Hearing aids and cochlear implants, accessories, and repairs are available. The clinic is a program of the School of Allied Health and Communicative Disorders and accepts most insurance plans.

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 Waubensee.

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

Balaji Rajagopalan, Ph.D., dean
Daewoo Park, Ph.D., 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 Advising and Student Resources.

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 knowledge; transform business; and develop principled, adaptable global citizens through innovative active learning and personalized experiences.

College Learning Goals and Objectives

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

Our graduates will integrate and apply functional and foundational business knowledge.

- College of Business graduates will be able to integrate knowledge of business disciplines to solve problems.
- College of Business graduates will be able to apply a problem solving framework to an unstructured business issue.
- College of Business graduates will be able to apply technology to analyze and manage business information.
- College of Business graduates will be able to recognize implications of conducting business in a global context.

Our graduates will demonstrate leadership and professional skills.

- College of Business graduates will be able to influence, motivate, and collaborate to achieve a common goal.
- College of Business graduates will be able to communicate business information clearly and persuasively.

Our graduates will demonstrate awareness of ethical business

practices.

- College of Business graduates will be able to apply an ethical framework to a business issue.

Career Compass

Students will complete an assessment of their interests, skills, 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.

Passport to the Business World

Passport is a non-credit program required for all 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 FINA 320, MGMT 335, MKTG 295, and OMIS 338 by the end of the first year in which they enroll in 300- or 400-level business courses. Prerequisites for MGMT 335 are: a grade of C or better in each of the Foundations of Business courses; having a 2.50 or better cumulative GPA; and having completed at least 45 semester credit hours. To continue as a business major, students must earn a C or better in FINA 320, MGMT 335, MKTG 295, and OMIS 338. 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 Advising and Student Resources; 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.

Foundations of Business Courses (29-32)

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 203 - Rhetoric and Composition II, Researched Writing in

the Domains (3),
 OR *ENGL 204 - Rhetoric and Composition, Accelerated
 Researched Writing in the Domains (3) If placed into
 ENGL 204,
 OR pass the English Core Competency II Examination (0)
 *MATH 211 - Calculus for Business and Social Science (4),
 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 (1)
 UBUS 200 - Passport Introduction (0)
 UBUS 201 - Passport Culmination (0)
 UBUS 223 - Introduction to Business Statistics (3)

Business Core Courses (18)

FINA 320 - Principles of Finance (3)
 MGMT 335 - Managing Individuals, Teams, and Organizations (3)
 MGMT 468 - Strategic Management (3)
 MKTG 295 - Principles of Marketing (3)
 OMIS 338 - Principles of Operations Management (3)
 OMIS 351 - Information Systems in Organizations (3),
 OR ACCY 310² - Accounting Information Systems (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 (4),
 OR *MATH 229 - Calculus I (4) (whichever is taken first)
 MGMT 217 - Legal Environment of Business (3)
 *OMIS 259 - Introduction to Business Information Systems (3)
 *PSYC 102 - Introduction to Psychology (3)
 UBUS 223 - Introduction to Business Statistics (3),
 OR STAT 200 - Elementary Statistics (4),
 OR STAT 300 - Introduction to Probability and Statistics (3)
 Three of the Following (9)
 FINA 320 - Principles of Finance (3)
 MGMT 333 - Principles of Management (3)
 MKTG 295 - Principles of Marketing (3)
 OMIS 338 - Principles of Operations Management (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 Office of Undergraduate Advisement and Student Resources.

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 Foundations of Business 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.

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 (1). Career and professional development for students majoring in the College of Business. Based on an assessment of students' interests, skills, and motivators, students explore the business majors and career paths that best fit their business self. Introduction in developing a career vision and strategy including goal setting, resume building, personal branding, and professional communication. This course is optional for transfer students with 45 or more credit hours.

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.

110. BUSINESS IN ACTION. (3). Introduction to the functions, language, etiquette, opportunities and roles of ethics and innovation in modern business. Includes analysis and innovative solution development for a business problem and exploration of a personalized plan for academic and professional success. Emphasis placed on oral and written business communications and reflective thinking.

200. PASSPORT INTRODUCTION (0). 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 FINA 320 and MGMT 335 and MKTG 295 and OMIS 338. S/U grading.

201. PASSPORT CULMINATION (0). Review for successful completion of all 7 continents in the Passport Program introduced in UBUS 200. Once verified, a business transcript reflecting student's experiences and accomplishments will be created. Satisfactory completion of UBUS 201 is a graduation requirement for all business majors. To be taken during a student's graduating semester. S/U grading. PRQ: UBUS 200.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

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

² Accountancy students are required to take ACCY 310.

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

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.

311. BUSINESS CORE: APPLICATIONS SEMINAR (3). Application of the business principles. Case analyses, exercises, current readings, and discussion of contemporary issues in business. Practice in team problem solving, oral and written communication skills. CRQ: UBUS 310; or FINA 320 and MGMT 335 and MKTG 295 and OMIS 338.

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: FINA 320 and MGMT 335 and MKTG 295 and OMIS 338, or consent of college.

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: FINA 320 and MGMT 335 and MKTG 295 and OMIS 338 and admission to the University Honors program, or consent of college.

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, 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 will be prepared for entrance into the profession or graduate study. They are expected to achieve the College of Business Undergraduate Learning Goals and Objectives and the following Department of Accountancy Learning Goals and Objectives.

Learning Goal 1: Develop and apply accountancy and business knowledge.

- Learning Objective 1: Demonstrate appropriate knowledge of technical accounting concepts.
- Learning Objective 2: Identify problems and consider alternative solutions.
- Learning Objective 3: Select data and methodology needed to make decisions.
- Learning Objective 4: Apply appropriate technology.

Learning Goal 2: Demonstrate professional skills.

- Learning Objective 5: Write with clarity and appropriate grammar.
- Learning Objective 6: Deliver professional and effective presentations.

Learning Goal 3: Demonstrate awareness of ethical issues in business and accounting.

- Learning Objective 7: Articulate relevant codes of conduct and professional standards.

Department Requirements

Retention in the accountancy program is competitive based on a student's overall GPA 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 FINA 320, MGMT 335, MKTG 295, and OMIS 338 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 Foundations of Business and Business Core, required ACCY courses, and all electives required for the major.

Major in Accountancy (B.S.)

Foundations of Business Courses (29-32)

Business Core Courses (18)

Requirements in Department (27)

- ACCY 320 - Intermediate Cost Management (3)
- ACCY 331 - Financial Reporting I (3)
- ACCY 332 - Financial Reporting II (3)
- ACCY 360 - Assurance Services (3)
- ACCY 370 - Accounting Career Planning Seminar (1)
- ^ACCY 375 - Accountancy Writing Lab (1)
- ACCY 415 - Data Analytics in Accounting (3)
- ACCY 450 - Taxation of Business Entities and Individuals (3)
- ^ACCY 470 - Accountancy Advanced Writing Lab (1)
- One of the following (3)
 - ACCY 421 - Advanced Cost Management (3)
 - ACCY 433 - Financial Reporting III (3)
 - ACCY 435 - SEC Reporting and Corporate Governance (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 435¹ - SEC Reporting and Corporate Governance (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 (3)

- FINA 410 - Financial Markets and Investments (3)

A student may not count more than 38 semester hours of accountancy toward the 120-semester hour baccalaureate requirement. Students who have already completed the required number of accountancy courses will be allowed to enroll in additional accountancy courses only during add/drop if sufficient resources are available.

Total Hours for a Major in Accountancy: 76-80

¹ If not used to fulfill requirement above.

^ This is a Writing Infused Course.

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 IIA's Endorsed Internal Auditing Program. To receive an IIA certificate of completion, a student must have either a B.S. in accountancy from NIU or an M.A.S. degree from NIU. As part of the certificate requirements students must complete ACCY 462, an approved business elective, and an academic internship (ACCY 473) in an internal audit position. A student completing the internal audit course work will have "Completion of internal audit course work as endorsed by the Institute of Internal Auditors" on the official NIU transcript.

Course List

206. INTRODUCTORY FINANCIAL ACCOUNTING (3). 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. PRQ: A grade of C or better in ACCY 206. CRQ: FINA 320.

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. PRQ: A grade of C or better in ACCY 207. CRQ: FINA 320.

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.

310. 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. PRQ: Acceptable score on the Accountancy Qualifying Examination or consent of department. CRQ: FINA 320.

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 310. PRQ: FINA 320 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: ACCY 310 with a grade of C or better.

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. Acceptable score on the Accountancy Qualifying Examination or consent of department. CRQ: FINA 320 and ACCY 310.

332. 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: A grade of C or better in each of the following courses: FINA 320 and ACCY 331.

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 310 with a grade of C or better.

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.

375. ACCOUNTANCY WRITING LAB (1). Development of effective written communication skills appropriate for accounting professionals. Provides the accounting specific context to integrate technical accounting knowledge with the skills and abilities needed to communicate that knowledge in written form within a professional accounting environment. Must be taken concurrently with ACCY 320 or ACCY 360. PRQ: ACCY 310 with a grade of C or better; COMS 100; ENGL 104 or ENGL 105.

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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, ACCY 310, and ACCY 375; or consent of department. CRQ: ACCY 360 or consent of department.

415. DATA ANALYTICS IN ACCOUNTING (3). Study of the use of accounting data to identify, analyze and solve business problems. Examines the processes needed to develop, report and analyze accounting data and the business risks related to data collection, storage and use. PRQ: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, ACCY 360, and ACCY 375.

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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, ACCY 320, and ACCY 375.

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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, ACCY 332, and ACCY 375.

435. SEC REPORTING AND CORPORATE GOVERNANCE (3). Examination of topics related to the origin, nature, and legal framework of the Securities and Exchange Commission (SEC); SEC registration and reporting; the requirements, procedures, and responsibilities of being a public company; and the theory and practice of corporate governance. PRQ: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, and ACCY 331.

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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, ACCY 332, and ACCY 375.

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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, and ACCY 332.

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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, and ACCY 331; 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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, ACCY 360, and ACCY 375.

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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, ACCY 332, ACCY 360, and ACCY 375.

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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, ACCY 360, and ACCY 375; or consent of department.

^470. ACCOUNTANCY ADVANCED WRITING LAB (1). Continuation of ACCY 375. Use of critical thinking skills to develop effective written communication appropriate for communicating technical topics in accounting. Explores a variety of situations that accounting professionals experience in their careers and discusses the necessary collucation skills. PRQ: ACCY 370 and ACCY 375.

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 ACCY 375 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 310 and ACCY 331 and ACCY 370 and ACCY 375; and either ACCY 320 or ACCY 360; 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: A grade of C or better in each of the following courses: FINA 320, MGMT 335, MKTG 295, OMIS 338, ACCY 332, and ACCY 375.

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: ACCY 375 and consent of department.

Accountancy Faculty

Rebecca Shortridge, C.P.A., Ph.D., Michigan State University, professor, chair, Donald E. Kieso Endowed Chair in Accountancy

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

Natalie T. Churyk, C.P.A., Ph.D., University of South Carolina, professor, William F. Doyle Endowed 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, assistant chair

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

Candice C. Hux, Ph.D., Bentley University, assistant professor

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

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

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

Martin J. Ndicu, Ph.D., Mississippi State University, assistant professor

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

Pamela A. Smith, C.P.A., Ph.D., University of North Texas, Distinguished 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

James C. Young, C.P.A., Ph.D., Michigan State University, Distinguished Teaching Professor, PwC Professor of Accountancy

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

Aleksandra B. Zimmerman, C.P.A., A.B.V., C.M.A., Ph.D., Case Western Reserve University, assistant 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 will be prepared for entrance into the profession or graduate study. They are expected to achieve the College of Business undergraduate learning goals and objectives and the following Department of Finance learning goals and objectives:

- 1. Demonstrate financial statement analysis skills relevant to assessing a firm's financial condition.**
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. The financial manager is using in his/her analysis the output of accounting processes—financial statements. Thus, it is important that every graduate acquire basic accounting skills and understand the derivation of the accounting data he/she is using. It is important the graduate is able to analyze a firm's financial statements to identify and solve problems.
- 2. Use statistical analysis to properly assess financial performance.**
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.
- 3. Apply appropriate technology to financial scenarios.**
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 are the financial calculator and a spreadsheet program such as Microsoft Excel. The students must also be familiar with presentation and word processing applications.

- 4. Write with conciseness and clarity for audiences seeking to make informed finance choices.**

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 said analysis to others. Thus it is necessary that graduates have strong written communication skills.

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 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 Foundations of Business and Business Core (for the major), required FINA courses, and all electives required for the major or minor.

Major in Finance (B.S.)

Foundations of Business Courses (29-32)

Business Core Courses (18)

Requirements in Department (21)

- FINA 330 - Corporate Finance (3)
- FINA 340 - Investments (3)
- FINA 350 - Financial Markets and Institutions (3)
- FINA 395 - Career Planning in Finance (3)
- FINA 485 - Cases in Financial Decision Making (3)
- Course work from the following (6)
 - FINA 430 - Treasury and Credit Management (3)
 - FINA 440 - Security Analysis and Portfolio Management (3)
 - FINA 445 - Security Analysis Practicum (3)
 - FINA 446 - Portfolio Management Practicum (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 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: 74-77

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 (24-25)

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 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 200 - Elementary Statistics (4),
OR STAT 300 - Introduction to Probability and Statistics (3)

Requirements (18)

ACCY 306 - Financial Accounting Information for Business Decisions (3)

FINA 320 - Principles of Finance (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 445 - Security Analysis Practicum (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 - Cases in Financial Decision Making (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 FINA 320, 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

290. QUANTITATIVE FINANCE FOR SCIENTISTS AND ENGINEERS (3). Understand the key concepts of finance that apply to rising professionals with strong quantitative and analytical skills. Master the economic intuition and tools necessary for key professional and personal financial decisions. PRQ: MATH 230 or consent of department.

315. PERSONAL INVESTING AND FINANCE (3). Overview of fundamental concepts of personal investing and finance. 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 personal finance management, and related topics. Emphasis on investment decision making and budgeting decisions.

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. PRQ: ACCY 206 or ACCY 288, and UBUS 223 or STAT 100 or STAT 200 or STAT 300, and sophomore standing.

326. INSURANCE PRINCIPLES (3). Survey of financial programs providing income to offset the perils of retirement, disability, disease, premature death, and unemployment. Study of life and health insurance as a major social institution, with private and governmental sectors. Emphasis on diverse viewpoints of insurance providers, regulators, and consumers. Exploration of fundamental issues of risk management and insurance.

328. REAL ESTATE PRINCIPLES (3). Principles of real estate ownership and interests, contracts, title transfer, deeds, mortgage instruments, and leases. Brokerage, real estate development, property management, and appraising. Emphasis on decision-making analysis in real estate investment and financing.

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 each of the following courses: ACCY 306 and FINA 320.

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 each of the following courses: ACCY 306 and FINA 320.

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 each of the following courses: ACCY 306 and FINA 320.

395. CAREER PLANNING IN FINANCE (3). Efficient job search techniques to help identify appropriate career opportunities. Preparation of resume, cover letters, business etiquette, business ethics, and mock interviews. Review and development of business writing techniques. Professional certifications in technological tools. CRQ: FINA 320 with a grade of at least C; and finance 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: FINA 320 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors; in addition ACCY 306 for business administration majors, and MGMT majors, and MKTG majors, and OMIS majors. CRQ: ACCY 331 for ACCY majors.

427. RETIREMENT AND ESTATE PLANNING (3). Integration of the financial planning process, concepts and applications into structuring planning for retirement and the transfer of assets through a will, or trusts and gifts. PRQ: FINA 340.

429. FINANCIAL PLANNING CASE STUDIES (3). Application and synthesis of financial and tax planning process. PRQ: FINA 315, FINA 326, FINA 340, and FINA 427.

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 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, or consent of department.

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 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, or consent of department.

445. SECURITY ANALYSIS PRACTICUM (3). 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. PRQ: Satisfactory completion of the finance core,¹ and ACCY 306 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, and consent of department.

446. PORTFOLIO MANAGEMENT PRACTICUM (3). 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. PRQ: FINA 440 and FINA 445 with a grade of at least C, and consent of department.

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

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 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, or consent of department.

455. **ANALYSIS OF DERIVATIVE SECURITIES (3).** Risk allocation function of options and futures markets studied from the perspective of market users. Hedging strategies and equilibrium pricing models. Roles of government regulation and international developments. PRQ: Satisfactory completion of the finance core,¹ and ACCY 306 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors; or FINA 410 with a grade of at least C for nonbusiness majors; or consent of department.

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, 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 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, or consent of department.

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 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, or consent of department.

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 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, or consent of department.

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 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, or consent of department.

485. **CASES IN FINANCIAL DECISION MAKING (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 and MGMT 335 and MKTG 295 and OMIS 338 for all business majors, or consent of department.

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

Gina K. Nicolosi, Ph.D., University of Cincinnati, associate professor, chair

Diane S. Docking, C.P.A., Ph.D., University of Kansas, associate professor

James M. Johnson, Ph.D., Ohio State University, Presidential Teaching Professor

Leonard L. Lundstrum, Ph.D., Indiana University, professor

Sukesh Patro, Ph.D., University of Pittsburgh, associate professor

Nan Qin, Ph.D., Virginia Tech, assistant professor

Yao Zheng, Ph.D., University of New Orleans, 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 social entrepreneurship; and an undergraduate certificate in social entrepreneurship.

Major in Management (B.S.)

Students pursuing the B.S. degree in management select one of three emphases: leadership and management, human resource management, or entrepreneurship and social responsibility. 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. Students in the entrepreneurship and social responsibility emphasis are prepared for business development or entrepreneurship positions in a variety of new and established commercial and/or social enterprises. This emphasis also enhances students' preparation for leadership and consulting endeavors.

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 355 or MGMT 457.

Satisfactory completion of MGMT 335 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 MGMT 335 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 Foundations of Business and 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, including elective courses required for the major. Repeats of FINA 320, MGMT 335, MKTG 295, and OMIS 338 will not be counted towards the maximum.

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.

Foundations of Business Courses (29-32)

Business Core Courses (18)

Emphasis 1. Leadership and Management

Requirements in Department (25)

^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 440 - Leading Teams (3)
 MGMT 447 - Leadership (3)
 MGMT 457 - Managerial Negotiations (3)
 Two of the following (6)
 *MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
 MGMT 360 - Coaching and Mentoring (3)
 MGMT 444 - Training and Development (3)
 MGMT 460 - Human Resource Management and Leadership Consulting (3)
 MGMT 477 - Managing Organizations in Competitive Environments (3)
 MGMT 487 - Multinational Management (3)
 MKTG 350 - Principles of Selling (3)
 MKTG 365 - Principles of Retailing (3)
 OMIS 352 - Managing Projects in Business (3)
 PHIL 337 - Business Ethics (3)

Total Hours for Emphasis 1, Leadership and Management: 71-75

* Available for general education credit.

^ This is a Writing Infused Course.

Emphasis 2. Human Resource Management

Requirements in Department (25)

^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)
 MGMT 457 - Managerial Negotiations (3)
 One of the following (3)
 MGMT 456 - Practicum in Human Resource Management (3)
 MGMT 460 - Human Resource Management and Leadership Consulting (3)
 PSYC 372 - Social Psychology (3)
 PSYC 471 - Industrial-Organizational Psychology (3)
 OMIS 324 - Introduction to Business Data Analytic Tools (3)
 OMIS 452 - Database Management for Business (3)
 PHIL 337 - Business Ethics (3)

Total Hours for Emphasis 2, Human Resource Management: 71-75

Emphasis 3. Entrepreneurship and Social Responsibility

Requirements in Department (25)

MGMT 227 - Entrepreneurship, Innovation, and Sustainability (3),
 OR MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
 MGMT 311 - Social Entrepreneurship (3)
 ^MGMT 346 - Business Communication (3)
 MGMT 355 - Human Resource Management (3)
 MGMT 395 - Career Planning in Management (1)
 MGMT 427 - Entrepreneurship and Business Model Design (3),
 OR MGMT 411 - Entrepreneurship in Microfinance Organizations (3),
 OR MGMT 421 - Global Social Venture Consulting (3)
 MGMT 437 - Entrepreneurship and Business Model Implementation (3),
 OR MGMT 431 - Social Venture Competition (3)
 MGMT 457 - Managerial Negotiations (3)
 One of the following (3)
 *MGMT 417 - Leading and Managing Change (3)
 MGMT 440 - Leading Teams (3)
 MGMT 460 - Human Resource Management and Leadership Consulting (3)
 MGMT 467 - Corporate Innovation and Social Responsibility (3)
 MKTG 350 - Principles of Selling (3)
 MKTG 443 - Marketing Research (3)
 PHIL 337 - Business Ethics (3)

Total Hours for Emphasis 3, Entrepreneurship and Social Responsibility: 71-75

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.

Foundations of Business Courses (29-32)

Business Core Courses (18)

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 346 - Business Communication (3)
 MGMT 355 - Human Resource Management (3)
 MGMT 487 - Multinational Management (3)
 OR MKTG 367 - Principles of Global Marketing (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: 77-81

Requirements

Satisfactory completion of MGMT 335 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 MGMT 335 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 Foundations of Business and Business Core. Business administration majors may repeat a maximum of two 300- or 400-level business courses required in the major. Repeats of FINA 320, MGMT 335, MKTG 295, and OMIS 338 will not be counted towards the maximum.

Accelerated B.S./J.D. in Business Administration and B.S./J.D. in Management and the College of Law

Admission

Students who want to earn a B.S. in Business Administration and a J.D. or a B.S. in Management and a J.D. may pursue a six-year integrated sequence of courses leading to these degrees. Students who wish to complete this program must identify themselves to the Department of Management as majors who wish to complete the Accelerated Program as early as possible. All undergraduates who major in Business Administration or Management and have completed at least 90 credit hours of undergraduate course work with a minimum GPA of 3.25 are eligible to apply to NIU's College of Law under the special provisions of this program. As part of the application to the College of Law, applicants must take the LSAT and receive a score at or above the 50th percentile of the

* Available for general education credit.

^ This is a Writing Infused Course.

¹ Course not open to College of Business majors.

previous year's matriculating law class. Applicants are advised to take the LSAT and submit their application to the College of Law no later than February of their junior year. Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the College of Law in general, as well as other factors normally considered in admissions decisions by the College of Law.

Curriculum

Students must complete all the requirements for the B.S. Business Administration or B.S. Management degrees as well as all general education requirements (90 credits 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.

Minor in Business Innovation and Entrepreneurship (15-18)

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

- ACCY 288¹ - Fundamentals of Accounting (3),
OR ACCY 206 - Introductory Financial Accounting (3) and
ACCY 207 - Introductory Cost Management (3)
- *MGMT 227 - Entrepreneurship, Innovation, and Sustainability (3),
OR MGMT 320 - Foundations of Business and
Entrepreneurship¹ (3),
OR MGMT 335 - Managing Individuals, Teams, and
Organizations (3)
- *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)
 - MEE 382 - Design Thinking (3)
 - MGMT 333 - Principles of Management¹ (3)
 - MGMT 447 - Leadership (3)
 - MGMT 457 - Managerial Negotiations (3)
 - MGMT 467 - Corporate Innovation and Social Responsibility (3)
 - MKTG 325 - Buyer Behavior (3)
 - MKTG 365 - Principles of Retailing (3)
 - MKTG 425 - Services Marketing (3)
 - OMIS 450 - Service Operations (3)

Minor in Social Entrepreneurship (21-24)

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 227 - Entrepreneurship, Innovation, and Sustainability (3),
OR MGMT 320¹ - Foundations of Business and
Entrepreneurship (3),
OR MGMT 335 - Managing Individuals, Teams, and
Organizations (3)
- *MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
- MGMT 411 - Entrepreneurship in Microfinance Organizations (3),
OR MGMT 421 - Global Social Venture Consulting (3)
OR MGMT 467 - Corporate Innovation and Social Responsibility
(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)
 - 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)
 - MKTG 350 - Principles of Selling (3)
 - MKTG 443 - Marketing Research (3)
 - NNGO 493 - Nonprofits and Community Engagement (3)
 - PSPA 326X/POLS 326 - Nonprofit Management (3)
 - PSPA 328/POLS 328X - Role of Nongovernmental Organizations
in Development (3)
 - PSPA 301 - Philanthropy and Fundraising (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.

Certificates of Undergraduate Study

Retail Management (12)

Coordinator: Ursula Sullivan, Department of Marketing

A certificate of undergraduate study in Retail Management is available. Please see a description of this certificate in the Department of Marketing section of the catalog.

* Available for general education credit.

¹ Course not open to College of Business majors.

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 815-753-1124.

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. Students who earn the Minor in Social Entrepreneurship will not be awarded the certificate.

Requirements (9)

*MGMT 311 - Social Entrepreneurship (3)

Two of the following (6)

*MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)

MGMT 411 - Entrepreneurship in Microfinance Organizations (3)

MGMT 421 - Global Social Venture Consulting (3)

MGMT 467 - Corporate Innovation and Social Responsibility (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 MGMT 335.

458. INTERNSHIP IN BUSINESS ADMINISTRATION (1-3). Full-time work for a summer or a semester as an intern in a business firm or organization under the supervision of a staff member of the Department of Management. Additional deliverables will be required. 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, MGMT 335, 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.

227. ENTREPRENEURSHIP, INNOVATION, AND SUSTAINABILITY (3). Examination of strategic aspects of launching and scaling an entrepreneurial venture with a focus on opportunity identification, feasibility analysis, sustainability and business planning. Develops knowledge about innovation in a variety of contexts. PRQ: Sophomore, junior, or senior standing; or consent of department.

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 MGMT 335.

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: Sophomore, junior, or senior standing.

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. PRQ: Sophomore, junior, or senior standing.

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. MANAGING INDIVIDUALS, TEAMS, AND ORGANIZATIONS (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: A grade of C or better in each of the following: ACCY 206, ACCY 207, ECON 260, ECON 261, ENGL 203 or ENGL 204, MATH 211 or MATH 229, MGMT 217, OMIS 259, PSYC 102, UBUS 100, and UBUS 223; cumulative GPA of at least 2.50; 45 or more semester hours; 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 203 or ENGL 204, and junior standing (all majors). CRQ: MGMT 335 (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 (nonbusiness majors); CRQ: MGMT 335 (business majors); or consent of department.

360. COACHING AND MENTORING (1-3). 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 semester hours. CRQ: Management major and MGMT 335 and MGMT 355, 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: MGMT 335 and MGMT 355, or consent of department.

* Available for general education credit.

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. PRQ: Management major and MGMT 335.

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: Grade of C or better in each of the following: FINA 320, MGMT 311, MGMT 335, MKTG 295, and OMIS 338 (business majors); MGMT 311 (nonbusiness majors); 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 each of the following courses: MGMT 335 and MGMT 355.

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: Sophomore, junior, or senior standing.

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 each of the following: FINA 320, MGMT 311, MGMT 335, MKTG 295, and OMIS 338 (business majors); MGMT 311, and MGMT 320 or MGMT 227 (nonbusiness majors); or consent of department.

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: Grade of C or better in each of the following: FINA 320, MGMT 335, MKTG 295, and OMIS 338 (business majors). CRQ: MGMT 327 (all majors); in addition MGMT 227 or MGMT 320 (nonbusiness majors); or consent of department.

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 each of the following: FINA 320, MGMT 311, MGMT 335, MKTG 295, and OMIS 338 (business majors); MGMT 311, and MGMT 227 or MGMT 320 (nonbusiness majors); 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 each of the following: FINA 320, MGMT 335, MGMT 355, MKTG 295, and OMIS 338.

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 411 or MGMT 421 or 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 each of the following: FINA 320, MGMT 335, MGMT 355, MKTG 295, and OMIS 338.

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.

440. LEADING TEAMS (3). Examination of ways to effectively lead teams in organizations, with a focus on issues related to team design, managing team processes, and evaluating team effectiveness. Activities highlight key applications of team research and development of team leadership skills. PRQ: Grade of C or better in the following courses: MGMT 335, FINA 320, MKTG 295, and OMIS 338; or consent of department.

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 each of the following: FINA 320, MGMT 335, MGMT 355, MKTG 295, and OMIS 338.

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 each of the following: FINA 320, MGMT 335, MKTG 295, and OMIS 338.

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 each of the following: FINA 320, MGMT 335, MGMT 355, MKTG 295, and OMIS 338.

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 each of the following: FINA 320, MGMT 335, MKTG 295 and OMIS 338; 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 a staff member of the Department of Management. Additional deliverables will be required. 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: Management major and MGMT 335 and consent of department.

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.

467. **CORPORATE INNOVATION AND SOCIAL RESPONSIBILITY (3).** Examination of the nature, process and forms of corporate entrepreneurship and social responsibility with a focus on entrepreneurial intensity, corporate venturing, entrepreneurial structure, leadership and social issues, and stakeholder management. Develops knowledge and capabilities about entrepreneurial and corporate social responsibility strategies, such as growth management, social initiatives, and corporate philanthropy, within established organizations. PRQ: Grade of C or better in MGMT 335 or MGMT 227 or MGMT 320; or consent of department.

468. **STRATEGIC MANAGEMENT (3).** Strategy formulation and implementation at the business and corporate levels. Emphasis on developing an understanding of the administration of business firms from a top-management perspective and application of strategic management concepts to real-world management issues in both domestic and global environments. A capstone course designed to integrate and apply functional business courses to strategic business problems. Strategy cases and a comprehensive business simulation used to develop and apply knowledge of strategic analysis, top-management decision making, and strategic change. PRQ: Grade of C or better in each of the following: FINA 320, MGMT 335, MKTG 295, and OMIS 338 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 and FINA 340 and FINA 350 (for FINA majors); MGMT 355 and MGMT 457 (for MGMT majors); OMIS 340 and OMIS 442 and OMIS 452 and OMIS 455 (for OMIS majors). CRQ: MKTG 495 (for MKTG 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.

481. **IDEA, INNOVATION, AND IMPACT ACCELERATOR LAB (3).** *Crosslisted as UEET 481X.* Application of the entrepreneurial process with a focus on opportunity identification, ideation, technological innovation, design for social impact, and environmental and social sustainability. Develops knowledge and capabilities about creativity in business, social impact and innovation, design and prototyping, engineering, business plan development, and new venture launch. PRQ: Consent of department.

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 each of the following: FINA 320, MGMT 335, MKTG 295, and OMIS 338. CRQ: 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, and grade of C or better in each of the following courses: MGMT 335 and MGMT 355, 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
 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, professor
 Amanda J. Ferguson, Ph.D., London Business School, assistant professor
 Charles R. Gowen, Ph.D., Ohio State University, professor
 Furkan A. Gur, Ph.D., Louisiana State University, assistant professor
 Hayling Lin, Ph.D., George Mason University, assistant 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
 Mahesh Subramony, Ph.D., Central Michigan University, associate 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 digital 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 FINA 320, MGMT 335, MKTG 295, and OMIS 338 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 Foundations of Business and 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.)

Foundations of Business Courses (29-32)

Business Core Courses (18)

Requirements in Department (24)

MKTG 99 - Portfolio (0)
 MKTG 325 - Buyer Behavior (3)
 MKTG 350 - Principles of Selling (3)
 MKTG 370 - Principles of Digital Marketing (3)
 MKTG 443 - Marketing Research (3)
 MKTG 495 - Marketing Strategy (3)
 Electives in marketing, which could include UBUS 485, or one of the following areas of study (9)¹

Digital Marketing (9)

MKTG 470 - Interactive Marketing Technology (3)
 Two of the following (6)
 MKTG 355 - Multichannel Direct Marketing (3)
 MKTG 448 - Integrated Marketing Communications (3)
 MKTG 455 - Database Marketing and Data Mining (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 Leadership, Metrics, and Application (3)
 MKTG 450 - Advanced Professional Selling (3)

Requirement outside Department (3)

MGMT 346 - Business Communication (3)

Total Hours for a Major in Marketing: 74-77

Accelerated B.S. in Marketing/M.S. in Digital Marketing

Admission

This program leads to both the B.S. in Marketing and M.S. in Digital Marketing degrees. Students who want to complete this program must identify themselves to the Department of Marketing as majors who will complete the accelerated program. The program is open to all undergraduates who major in Marketing and have completed at least 90 semester hours of undergraduate course work with a minimum grade point average of 3.00. Students who have met these standards in their B.S. in Marketing degree program must also apply for admission to the M.S. in Digital Marketing program under the special provisions of this program. Students must meet the application deadlines given by the Graduate School. To qualify for this program, applicants must have a grade of B or higher in MKTG 295, OMIS 351, and UBUS 223 and participate in an oral interview with the director or designated representative of the M.S. in Digital Marketing program. Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the M.S. in Digital Marketing program in general, as well as other factors normally considered in admissions decisions by the director of the M.S. in Digital Marketing program.

Curriculum

Students must complete all the business core requirements for the B.S. in Marketing degree program as well as all general education requirements, MKTG 325, MKTG 370, and OMIS 351 prior to their taking classes in the M.S. in Digital Marketing program. Once admitted into the B.S. in Marketing/M.S. in Digital Marketing program and having completed all course requirements for entry, students will start taking classes in the M.S. in Digital Marketing program (up to 15 semester hours). These dual-listed courses will also count toward 15 semester hours in the undergraduate degree. Upon receiving their undergraduate degree, students will then follow the standard timetable for receiving a M.S. in Digital Marketing program.

Minor in International Marketing (27-28)

The minor in international marketing is available to NIU undergraduate students in good academic standing. The minor in international marketing is not open to students with a major or minor in marketing. Admission in the international marketing minor is competitive based on the student's overall GPA.

Students wishing to apply for the minor in international marketing must complete an application by the semester deadline; applications and deadline dates are available in the Department of Marketing. Students in the international marketing minor must receive a C or better in each of the required marketing courses and marketing electives.

Pre-admission Requirements (9-10)

PSYC 102 - Introduction to Psychology (3)
 UBUS 223 - Introduction to Business Statistics (3),
 OR STAT 200 - Elementary Statistics (4)
 OR STAT 300 - Introduction to Probability and Statistics (3)
 ECON 261 - Principles of Macroeconomics (3)

Requirements (18)

MKTG 295 - Principles of Marketing (3)
 MKTG 367 - Principles of Global Marketing (3)
 MKTG 467 - Global Marketing Management (3)
 Two of the following (6)
 MKTG 325 - Buyer Behavior (3)
 MKTG 350 - Principles of Selling (3)
 MKTG 443 - Marketing Research (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)
 An NIU sponsored study abroad experience with departmental approval (3)

Minor in Marketing (24-24)

Retention in the marketing minor is competitive based on the student's overall GPA and a grade of C or better in MKTG 295. 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 100 - Basic Statistics (3),
 OR STAT 200 - Elementary Statistics (4),
 OR STAT 300 - Introduction to Probability and Statistics (3)

¹ Credits earned in MKTG 295, Principles of Marketing, and MKTG 458, Internship in Marketing, may not be used to complete the elective requirement.

Requirements (15)

MKTG 295 - Principles of Marketing (3)

MKTG 350 - Principles of Selling (3)

MKTG 370 - Principles of Digital Marketing (3)

Two of the following (6)

MKTG 325 - Buyer Behavior (3)

MKTG 345 - Business Marketing (3)

MKTG 355 - Multichannel Direct Marketing (3)

MKTG 365 - Principles of Retailing (3)

MKTG 367 - Principles of Global Marketing (3)

MKTG 425 - Services Marketing (3)

MKTG 443 - Marketing Research (3)

MKTG 446 - Sales Leadership, Metrics, and Application (3)

MKTG 448 - Integrated Marketing Communications (3)

MKTG 450 - Advanced Professional Selling (3)

MKTG 455 - Database Marketing and Data Mining (3)

MKTG 464 - Product Planning and Development (3)

MKTG 467 - Global Marketing Management (3)

MKTG 490 - Current Topics in Marketing (3)

Integrated Minor in Marketing/M.S. in Digital Marketing**Admission**

This program leads to both the Minor in Marketing and M.S. in Digital Marketing degree. Students who want to complete this program must identify themselves to the Department of Marketing as minors who will complete the integrated program. The program is open to all undergraduates who have registered for the Minor in Marketing and have completed at least 90 semester hours of undergraduate course work with a minimum grade point average of 3.00. Students who have met these standards in their Minor in Marketing program must also apply for admission to the M.S. in Digital Marketing program under the special provisions of this program. Students must meet the application deadlines given by the Graduate School. To qualify for this program, applicants must have completed MKTG 295 and MKTG 370 with a grade of B or higher in each course, have satisfactorily completed ECON 260, PSYC 102, and UBUS 223 (or equivalent) with a grade of B or higher in each course, and participate in an oral interview with the Director or designated representative of the M.S. in Digital Marketing program.

Curriculum

Students must complete all the pre-admission requirements for the Minor in Marketing as well as all general education requirements, MKTG 295 and MKTG 370 prior to their taking classes in the M.S. in Digital Marketing program. Once admitted into the Minor in Marketing/M.S. in Digital Marketing program and having completed all course requirements for entry, students will start taking classes in the M.S. in Digital Marketing program (up to 9 semester hours). These dual-listed courses will also count toward 9 semester hours in the Minor in Marketing. Upon receiving their undergraduate degree, students will then follow the standard timetable for receiving an M.S. in Digital Marketing degree. Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the M.S. in Digital Marketing program in general, as well as other factors normally considered in admissions decisions by the Director of the M.S. in Digital Marketing program.

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**Digital Marketing (12)**

Coordinator: Michael Nikolich, Department of Marketing

This certificate is designed for all majors who wish to have a certificate in digital marketing. Digital 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 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 digital 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 MKTG 295 for planning purposes. Applications are available in the Department of Marketing.

Required courses

MKTG 370 - Principles of Digital Marketing (3)

MKTG 443 - Marketing Research (3)

MKTG 470 - Interactive Marketing Technology (3)

One of the following (3)

MKTG 355 - Multichannel Direct Marketing (3)

MKTG 448 - Integrated Marketing Communications (3)

MKTG 455 - Database Marketing and Data Mining (3)

OMIS 452 - Database Management for Business (3)

Integrated Certificate in Digital Marketing/M.S. in Digital Marketing**Admission**

This program leads to both the undergraduate Certificate in Digital Marketing and M.S. in Digital Marketing degree. Students who want to complete this program must identify themselves to the Department of Marketing as Certificate students who will complete the integrated program. The program is open to all undergraduates who are pursuing the Certificate in Digital Marketing and have completed at least 90 semester hours of undergraduate course work with a minimum grade point average of 3.00. Students who have met these standards in their Certificate in Digital Marketing program must also apply for admission to the M.S. in Digital Marketing program under the special provisions of this program. Students must meet the application deadlines given by the Graduate School. To qualify for this program,

applicants must have completed MKTG 295 and MKTG 370 with a grade of B or higher in each course, and participate in an oral interview with the Director or designated representative of the M.S. in Digital Marketing program.

Curriculum

Students must complete MKTG 295 and 370 as well as all general education requirements prior to their taking classes in the M.S. in Digital Marketing program. Having completed all course requirements for entry, students will start taking classes in the M.S. in Digital Marketing program (up to 9 semester hours). These dual-listed courses will also count toward 9 semester hours in the Certificate in Digital Marketing program. Upon receiving their undergraduate degree, students will then follow the standard timetable for receiving an M.S. in Digital Marketing degree.

Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the M.S. in Digital Marketing program in general, as well as other factors normally considered in admissions decisions by the Director of the M.S. in Digital Marketing program.

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. Marketing 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. Business majors are encouraged to enroll in MKTG 350 the semester after MKTG 295, while non-business majors may opt out to take MKTG 295 concurrently with MKTG 350. MKTG 350 is the prerequisite for all other course work with this certificate.

Students earning the certificate in professional selling are required to interview for a seat in MKTG 450 during the semester prior to their intended enrollment. Those who are not selected will be offered the opportunity to take an alternative course in order to complete their certificate requirements.

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.

Required courses

MKTG 350 - Principles of Selling (3)
MKTG 435¹ - Business-to-Business Selling (3)
MKTG 450 - Advanced Professional Selling (3)

One of the following

MGMT 457 - Managerial Negotiations (3)
MKTG 410 - Professional Selling and Cultural Perspectives (3)
MKTG 411 - Strategic Selling Perspectives (3)
MKTG 412 - Professional Selling in the Field (3)
MKTG 415 - Global Selling Perspectives (3)
MKTG 440 - Contemporary Leadership in Sales (3)
MKTG 446 - Sales Leadership, Metrics, and Application (3)

Integrated Certificate in Professional Selling/M.S. in Digital Marketing

Admission

This program leads to both the undergraduate Certificate in Professional Selling and M.S. in Digital Marketing degree. Students who want to complete this program must identify themselves to the Department of Marketing as Certificate students who will complete the integrated program. The program is open to all undergraduates who are pursuing the Certificate in Professional Selling and have completed at least 90 semester hours of undergraduate course work with a minimum grade point average of 3.00. Students who have met these standards in their Certificate in Professional Selling program must also apply for admission to the M.S. in Digital Marketing program under the special provisions of this program. Students must meet the application deadlines given by the Graduate School. To qualify for this program, applicants must have completed MKTG 295 and MKTG 350 with a grade of B or higher in each course, and participate in an oral interview with the Director or designated representative of the M.S. in Digital Marketing program.

Curriculum

Students must complete MKTG 295 and MKTG 350 as well as all general education requirements prior to their taking classes in the M.S. in Digital Marketing program. Having completed all course requirements for entry, students will start taking classes in the M.S. in Digital Marketing program (up to 6 semester hours). These dual-listed courses will also count toward 6 semester hours in the Certificate in Professional Selling program. Upon receiving their undergraduate degree, students will then follow the standard timetable for receiving an M.S. in Digital Marketing degree.

Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the M.S. in Digital Marketing program in general, as well as other factors normally considered in admissions decisions by the Director of the M.S. in Digital Marketing program.

Retail Management (12)

Coordinator: Ursula Sullivan, Department of Marketing

This certificate is designed for all majors who wish to have a certificate in retail management. The certificate helps prepare students for store and department management positions in major retail organizations, such as Kohl's and Target. In addition, the certificate in this area provides students with strong customer service and selling skills, which prepare students for understanding the challenges that they confront as retail managers. Overall, students who complete the retail management certificate have skills to successfully work with consumers and employees in mass merchandiser, specialty, grocery, apparel, and department store settings.

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 and management. 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 MGMT 335 and MKTG 295 (for business majors), or MGMT 333 (for nonbusiness majors), for planning purposes. Applications are available in the Department of Management or Department of Marketing.

Required courses

MGMT 355 - Human Resource Management (3)

MKTG 365 - Principles of Retailing (3)

MKTG 425 - Services Marketing (3)

One of the following

MGMT 457 - Managerial Negotiations (3)

MKTG 350 - Principles of Selling (3)

MKTG 370 - Principles of Digital Marketing (3)

OMIS 450 - Service Operations (3)

Integrated Certificate in Retail Management/M.S. in Digital Marketing

Admission

This program leads to both the undergraduate Certificate in Retail Management and M.S. in Digital Marketing degree. Students who want to complete this program must identify themselves to the Department of Marketing as Certificate students who will complete the integrated program. The program is open to all undergraduates who are pursuing the Certificate in Retail Management and have completed at least 90 semester hours of undergraduate course work with a minimum grade point average of 3.00. Students who have met these standards in their Certificate in Retail Management program must also apply for admission to the M.S. in Digital Marketing program under the special provisions of this program. Students must meet the application deadlines given by the Graduate School. To qualify for this program, applicants must have completed MKTG 295 and MKTG 350 with a grade of B or higher in each course, and participate in an oral interview with the Director or designated representative of the M.S. In Digital Marketing program.

Curriculum

Students must complete MKTG 295 and MKTG 350 as well as all general education requirements prior to their taking classes in the M.S. in Digital Marketing program. Having completed all course requirements for entry, students will start taking classes in the M.S. in Digital Marketing program (up to 6 semester hours). These dual-listed courses will also count toward 6 semester hours in the Certificate in Retail Management program. Upon receiving their undergraduate degree, students will then follow the standard timetable for receiving an M.S. in Digital Marketing degree.

Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the M.S. in Digital Marketing program in general, as well as other factors normally considered in admissions decisions by the Director of the M.S. in Digital Marketing program.

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.

280. HUMAN DIVERSITY MARKETING STRATEGIES (1). Examination of various marketing segments from diverse consumer populations, learning to appreciate consumer diversity within the context of commercial and non-profit marketplace exchanges. An appreciation for working with ethnic, multicultural, marginalized, or stigmatized consumers and employees will be acquired. PRQ: College of Business majors only, or by consent of department.

295. 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. PRQ: Sophomore 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 295 and PSYC 102; in addition for business administration majors: FINA 320 and MGMT 335 and OMIS 338.

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 295.

350. PRINCIPLES OF SELLING (3). Introduction to professional selling focusing on customer needs and decision making, effective communication skills, value creation, enhancing customer satisfaction, and social networking. Selling skills and concepts are developed through planning and conducting professional sales calls via extensive sales exercises and role-plays. CRQ: MKTG 295.

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 295.

365. PRINCIPLES OF RETAILING (3). *Crosslisted as FSMD 365X*. Study of retail institutions; store organization, location strategy, merchandising, inventory control, customer communication, price determination, and the management of retail salespersons. PRQ: MKTG 295.

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 295.

370. PRINCIPLES OF DIGITAL MARKETING (3). Introduction to digital marketing applications. Topics include an introduction to mobile marketing, social media marketing, discussion groups, email, the different functions and applications of the Internet, and how digital technologies have changed business and consumer practices. Emphasis on the effect of the use of digital technology on a company's existing market mix and current and potential uses of the Internet for marketing tactics and strategies. PRQ: MKTG 295.

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: MKTG 295, or consent of department.

395. CAREER MARKETING (1). Designed to help students explore career opportunities in marketing, successfully job hunt, and become acquainted with the marketing business environment. Job search strategies, setting career goals, business ethics, business communication skills, networking, and business etiquette. Open only to marketing majors or by consent of department. PRQ: MKTG 295.

410. PROFESSIONAL SELLING AND CULTURAL PERSPECTIVES (3). 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 and consent of department.

411. STRATEGIC SELLING PERSPECTIVES (3). Travel to locations to study strategies, trends, and the dynamics of attracting and maintaining customer relationships across varied industries (e.g., technology, health-care, sports/entertainment, etc.). Company visits, presentations, and cultural requirements/visits. Engagement in activities that improve understanding of sales strategy development and implementation. Destinations may rotate so students should consult the department to determine the current field study. PRQ: MKTG 350 and consent of department.

412. PROFESSIONAL SELLING IN THE FIELD (3). Exposure to contemporary sales leadership issues at corporate locations. Recent topics include career development and advancement, relocation, mentoring, ethical dilemmas in career progressions, personal financial planning, amongst others. Includes presentations from recognized sales executives and discussions with company representatives across varied industries. Engagement in a variety of activities including presentations, needs analysis, simulations, and a term project. PRQ: MKTG 350 and consent of department.

415. GLOBAL SELLING PERSPECTIVES (3). Study-abroad experience to study cultural differences, problems, issues, trends, and practices in professional selling within the international environment. Includes: 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 and 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 295.

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.

440. CONTEMPORARY LEADERSHIP IN SALES (3). Draws on insights from industry leaders to examine topics in professional selling as they relate to the sales person and to sales strategy including consensus and social selling, personal branding, and sales ethics. 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: A grade of C or better in the following courses: FINA 320 and MGMT 335 and MKTG 295 and OMIS 338 (for business majors); MKTG 295, and UBUS 223 or STAT 200 or STAT 300 (for nonbusiness majors).

446. SALES LEADERSHIP, METRICS, AND APPLICATION (3). Development of sales leadership for team culture and dynamics, recruiting and selecting sales force, evaluation of representative performance metrics and compensation. Creating value proposition and multi-product portfolio analysis through a series of case study presentations utilizing industry specialists. PRQ: MKTG 350.

448. INTEGRATED MARKETING COMMUNICATIONS (3). Development of marketing communications strategy as a tool for making and implementing marketing decisions. Emphasis on communication strategy formulation, digital communication strategy formulation, and development of the promotion mix strategy. Topics include advertising, public relations, sales promotions, direct marketing, digital communications, and personal selling. PRQ: MKTG 295.

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. PRQ: MKTG 295 and OMIS 351.

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.

464. PRODUCT PLANNING AND DEVELOPMENT (3). Examination of the factors influencing product planning and pricing decisions of the firm in a digital environment. Analysis of challenges and risks related to new product launch and managing product life cycle. Topics include idea generation, concept testing, pricing strategy, industry and market analysis, test marketing, and product launch. PRQ: MKTG 295.

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: MKTG 370.

490. CURRENT TOPICS IN MARKETING (3). Study of new developments in marketing including current topics and issues. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: MKTG 295 and consent of department.

491. INDEPENDENT STUDY IN MARKETING (1-3). Studies conducted through special readings or projects in topics in marketing. PRQ: MKTG 295 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: FINA 320 and MGMT 335 and MKTG 443 and OMIS 338 and senior standing and marketing major. CRQ: MKTG 99.

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

Vijaykumar Krishnan Palghat, Ph.D., University of Cincinnati, associate professor, chair

Timothy W. Aurand, Ed.D., Northern Illinois University, professor, James E. Thompson Professor of Marketing

Elisa Fredericks, Ph.D., University of Illinois, Chicago, associate professor

Geoffrey L. Gordon, Ph.D., University of Kentucky, professor

Mark D. Groza, Ph.D., University of Massachusetts, associate professor, Enterprise Holdings Professor of Sales

Mya P. Groza, Ph.D., University of Wyoming, assistant professor

Robert M. Peterson, Ph.D., University of Memphis, professor

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

Denise D. Schoenbachler, Ph.D., University of Kentucky, professor, Douglas and Cynthia Crocker Endowed Professor in Business

Ursula Y. Sullivan, Ph.D., Northwestern University, associate 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 supply chain management, database management enterprise resource management, 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 three areas of study: Supply Chain Management, Data Analytics, or Information Technology Management.

Supply Chain Management prepares students for entry-level positions as supply chain analysts. Courses in the Supply Chain Management area of study focus on the concepts, processes, and strategies associated with supply chain management in today's global economy.

Data Analytics prepares students for entry-level positions as business data analysts. Courses in Data Analytics focus on the concepts, techniques, and strategies associated with analyzing large amounts of quantitative and qualitative data to support organizations decision making.

Information Technology Management prepares students for entry-level positions as information technology analysts. Courses in the Information Technology Management 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:

- 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.
- 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.
- 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 OMIS 338 and OMIS 351 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 other 300- or 400-level OMIS courses (except OMIS 324). To be retained as a major in the department, a student may not repeat more than two OMIS courses.

All operations and information management majors must satisfactorily complete a portfolio of a selected collection of their operations management and information systems assignments to be turned in no later than the last week of classes in the semester that they plan to graduate. Instructions for portfolio content may be found in the Department of Operations Management and Information Systems.

To graduate 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 Foundations of Business and 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.)

Foundations of Business Courses (29-32)

Business Core Courses (18)

Requirements in Department (28)

- OMIS 99 - Portfolio (0)
- OMIS 300 - Career Planning in Operations and Information Management (1)
- OMIS 340 - Supply Chain Management (3)
- OMIS 442 - Process and Quality Improvement (3)
- OMIS 452 - Database Management for Business (3)
- OMIS 455 - Enterprise Resource Planning (3)
- One of the following areas of study (9)

Supply Chain Management (12)

Four of the following (12)

- OMIS 327 - Decision Analysis (3)
- OMIS 444 - Manufacturing Systems Management (3)
- OMIS 450 - Service Operations (3)
- OMIS 478 - Supply Chain Systems (3)
- OMIS 480 - Advanced Supply Chain Management (3)

Data Analytics (12)

Four of the following (12)

- OMIS 324 - Introduction to Business Data Analytic Tools (3)
- OMIS 472 - Introduction to Business Intelligence (3)
- OMIS 473 - Data Visualization for Business (3)
- OMIS 474 - Digital Analytics (3)
- OMIS 482 - Predictive Business Analytics (3)

Information Technology Management (12)

Four of the following (12)

- OMIS 352 - Managing Projects in Business (3)
- OMIS 449 - Business Application Development (3)
- OMIS 460 - Business Computing Environments and Networks (3)
- OMIS 462 - Business Systems Analysis, Design, and Development (3)
- OMIS 475 - Internet and Web Computing Technologies (3)

One additional 300- or 400-level OMIS course (3)

Total Hours for a Major in Operations and Information Management: 75-78**Degree with Honors**

NIU University Honors students who graduate with a B.A. or B.S. are guaranteed admission into the Master of Science in Data Analytics (MSDA) and Master of Science in Management Information Systems (MS MIS) programs as space permits.

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.

Minor in Business Analytics (24-25)

The minor in business analytics is offered to students across campus (all majors) to prepare students to solve complex decision problems in a business environment with a combination of quantitative skills, modeling techniques, and hands-on expertise using current software applications for data driven decision making.

Students with these skills are in high demand in a variety of industries and sectors including accounting, management, marketing, finance, information systems, operations, health

care, engineering, and energy. Equipped with a solid technical foundation in data analysis and model-driven management decision making, graduates of the minor will be prepared for successful careers in this growing field.

This minor will help students develop the business analytic skills necessary to compete in today's "big data" world. Admission in the business analytics minor is competitive based on a student's overall GPA and a grade of C or better in the pre-admission courses. Students in the minor in business analytics must receive a grade of C or better in all courses.

Students must complete an application for the business analytics minor by the semester deadline. Applications and deadline dates are available in the Department of Operations Management and Information Systems.

Pre-Admission Requirements (9-10)

- UBUS 223 - Introduction to Business Statistics (3),
OR STAT 100 - Basic Statistics (3),
OR STAT 200 - Elementary Statistics (4)
- OMIS 338 - Principles of Operations Management (3),
OMIS 351 - Information Systems in Organizations (3),
OR ACCY 310 - Accounting Information Systems (3)

Core Requirements (15)

- OMIS 324/STAT 324X - Introduction to Business Data Analytic Tools (3)
- OMIS 327 - Decision Analysis (3),
OR ACCY 415 - Data Analytics in Accounting (3)
- OMIS 452 - Database Management for Business (3),
OR MKTG 455 - Database Marketing and Data Mining (3)
- OMIS 472 - Introduction to Business Intelligence (3)
OR OMIS 473 - Data Visualization for Business (3)
OR OMIS 474 - Digital Analytics (3)
- OMIS 482 - Predictive Business Analytics (3)

Certificates of Undergraduate Study**Enterprise Management Using SAP Software (12)**

Coordinator: Russell Devereaux, Department of Operations Management and Information Systems

This certificate is designed for all majors. Enterprise Management Using SAP Software is a broad category of technologies, applications, and practices for gathering, storing, accessing, and analyzing enterprise data to support effective decision making. Enterprise software is a category of computer programs used to run a business. Enterprise software is designed to solve organization-wide problems, rather than individual departmental problems. The goal for an organization adopting enterprise software is improved productivity and efficiency through better management of its core business processes. The market leader in enterprise software is SAP. A certificate in Enterprise Management 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 contact the undergraduate advisor in the Department of Operations Management and Information Systems.

Required Courses (four of the following - 12):

OMIS 340 - Supply Chain Management (3)
 OMIS 444 - Manufacturing Systems Management (3)
 OMIS 455 - Enterprise Resource Planning (3)
 OMIS 472 - Introduction to Business Intelligence (3)
 OMIS 478 - Supply Chain Systems (3)

Business Analytics Using SAS Software – SAS Joint Certificate Program (12)

Coordinator: Russell Devereaux, Department of Operations Management and Information Systems

This certificate is designed for all majors. It brings together technology, data, and strategic decision making. The certificate prepares students to solve complex business problems by using a combination of quantitative skills, modeling techniques, and SAS software applications for data driven decision making. Businesses from every industry and all disciplines are actively seeking professionals who can effectively perform Business Analytics.

SAS is the leader in business analytics application software. SAS analytical talent is in short supply and high demand in today's business world. This certificate is an SAS Joint Certificate Program approved by SAS Global Academic Program to prepare students to work in a data-rich environment.

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. Some courses may have prerequisites that are not part of the certificate curriculum.

Students interested in the certificate should contact the undergraduate advisor in the Department of Operations Management and Information Systems.

Required Courses

OMIS 324 - Introduction to Business Data Analytic Tools (3)
 OMIS 452 - Database Management for Business (3)
 OMIS 472 - Introduction to Business Intelligence (3)
 OR OMIS 473 - Data Visualization for Business (3)
 OR OMIS 474 - Digital Analytics (3)
 OMIS 482 - Predictive Business Analytics (3)

Information Systems (12)

Coordinator: Russell Devereaux, 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.

Students interested in the certificate should contact the undergraduate advisor in the Department of Operations Management and Information Systems.

Required Courses

Four of the following five OMIS courses:

^OMIS 352 - Managing Projects in Business (3)
 OMIS 452 - Database Management for Business (3)
 OMIS 460 - Business Computing Environments and Networks (3)
 OMIS 462 - Business Systems Analysis, Design, and Development (3)
 OMIS 475 - Internet and Web Computing Technologies (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 or consent of department. CRQ: OMIS 338 and OMIS 351.

324. INTRODUCTION TO BUSINESS DATA ANALYTIC TOOLS (3). *Crosslisted as STAT 324X.* Introduction to business analytic tools focusing on sampling, multivariate regression, factor analysis and cluster analysis to identify and solve business problems. PRQ: UBUS 223 or STAT 200

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: OMIS 338

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. PRQ: OMIS 259 and sophomore 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: OMIS 338 and OMIS 351. CRQ: FINA 320 and MGMT 335 and MKTG 295.

351. INFORMATION SYSTEMS IN ORGANIZATIONS (3). Examination of functional management information systems (MIS) existing within organizations. Emphasis on analyzing and designing computer systems for functional areas. Need for integration of these systems stressed through the use of case studies. PRQ: OMIS 259 and sophomore standing.

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). CRQ: OMIS 338 and OMIS 351.

^ This is a Writing Infused Course.

379. BUSINESS APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS (3). Examination of leveraging an organization's spatial data to analyze and solve business problems. Extensive computer laboratory work designing business geographic services using commercially available software. PRQ: GEOG 256, or OMIS 351, or consent of department.

400. INTERNATIONAL STUDY IN OPERATIONS AND INFORMATION MANAGEMENT (3). Short-term study abroad experience to study significant concepts and problems of operations and information management in the international environment. Analysis of global operational issues through visitation and study of foreign organizations under the supervision of a department faculty member. CRQ: OMIS 338 or OMIS 351.

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: FINA 320 and MGMT 335 and MKTG 295 and OMIS 338 and OMIS 351.

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: OMIS 351 or ACCY 310, and OMIS 338 and FINA 320 and MGMT 335 and MKTG 295.

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: OMIS 340.

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.

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: OMIS 338 and OMIS 351. CRQ: FINA 320 and MGMT 335 and MKTG 295.

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: OMIS 442.

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: OMIS 338 and OMIS 351.

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: OMIS 338 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: OMIS 338 and OMIS 351.

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: OMIS 351 or ACCY 310 (Accountancy majors required to take ACCY 310). CRQ: OMIS 338 and FINA 320 and MGMT 335 and MKTG 295.

455. ENTERPRISE RESOURCE PLANNING (3). In-depth analysis of current business enterprise systems; their system components, database, information requirements, and system interfaces. Commercial software used to illustrate the concepts presented. PRQ: OMIS 338 and OMIS 351. CRQ: FINA 320 and MGMT 335 and MKTG 295.

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: OMIS 338 or OMIS 351, and operations and information management major, and consent of department.

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: OMIS 338 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 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: OMIS 340.

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 340.

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. CRQ: OMIS 324.

473. DATA VISUALIZATION FOR BUSINESS (3). Introduction to basic data visualization design and evaluation principles, including techniques for visualizing multivariate, text-based, temporal, geospatial, hierarchical, and network/graph-based data in the business world. PRQ: OMIS 452. CRQ: OMIS 324.

474. DIGITAL ANALYTICS (3). Overview of key concepts, tools, and analysis techniques of quantitative internet data to optimize websites and web marketing initiatives, including search engine optimization, tracking, and website traffic via pay per click. PRQ: OMIS 452. CRQ: OMIS 324.

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. CRQ: OMIS 449 or consent of department.

478. SUPPLY CHAIN SYSTEMS (3). Intensive examination of decision systems for supply chain management. Supply chain strategy, supply chain analysis, and cross-functional solutions to supply chain problems. Emphasis on selection and use of information systems and decision models, and effective presentation of results. PRQ: OMIS 340. CRQ: OMIS 327.

480. ADVANCED 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 340 and OMIS 452. CRQ: OMIS 327.

482. PREDICTIVE BUSINESS ANALYTICS (3). Study of advanced topics in predictive business analytics. Topics include data visualization, time series analysis, forecasting and advanced data mining. Emphasis on using predictive business analytics software such as R, SAS, and SAP Predictive Analytics on case studies and projects to see the important real-world implications of predictive analytics in business. PRQ: OMIS 324 and OMIS 452.

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: Consent of department.

498. BUSINESS ANALYSIS CAPSTONE (3). Focus on developing and performing descriptive and basic predictive data analysis skills necessary to make data-driven operational decisions using Microsoft Access, Excel, and SQL Server. Application of skills by analyzing real data provided by a business sponsor. Teams gather and prepare clean data, perform various data analyses, develop a dashboard to make the analysis approachable and repeatable, and share results and recommendations with a final report and presentation for the sponsor. PRQ: OMIS 3340 and OMIS 442 and OMIS 452 and OMIS 455.

Operations Management and Information Systems Faculty

Chang Liu, D.B.A., Mississippi State University, professor, chair
Charles E. Downing, Ph.D., Northwestern University, Distinguished Teaching Professor

Kishen Iyengar, Ph.D., University of Texas, assistant professor
Jung Young Lee, Ph.D., Michigan State University, assistant professor

Yipeng Liu, Ph.D., University of Florida, assistant professor
Kathleen L. McFadden, Ph.D., University of Texas, Arlington, Board of Trustees Professor

John Pendergrass, Ph.D., University of Illinois, assistant professor
Charles G. Petersen, Ph.D., Indiana University, professor
Balaji Rajagopalan, Ph.D., University of Memphis, professor
Andrew J. Setterstrom, Ph.D., Southern Illinois University, assistant professor

Ying Wang, Ph.D., Texas Tech University, assistant professor

College of Education

Laurie Elish-Piper, Ph.D., dean
David Walker, Ph.D., associate dean, Academic Affairs
William Pitney, Ph.D., associate dean, Research, Resources, and Innovation

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.

Department Names and Undergraduate Programs Offered

Department of Counseling and Higher Education

Department of Curriculum and Instruction
 B.S.Ed. in elementary education
 B.S.Ed. in middle level teaching and learning

Department of Educational Technology, Research and Assessment
 B.S. in applied management

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 Special and Early Education
 B.S. in early childhood education
 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 no later than the semester before student teaching. 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 course work 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 an individualized program of study which differs from the university's regular major and minor programs. Such an individualized course of study, termed the B.S. contract major, utilizes existing university courses. The requirement of the contract major replaces the requirement of a regular departmental major. (See the section "University Graduation Requirements.")

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 student learning outcomes for this degree are located at <http://www.niu.edu/assessment/clearinghouse/outcomes/index.shtml>.

Admission

Students seeking approval for a contract major in the College of Education must have at least sophomore standing and must file an application with the College of Education. Information and forms can be obtained from the College of Education student services office.

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 major department in the College of Education in which the majority of the course work is being taken. The student formulates the proposal in consultation with the faculty sponsor. The program must be logically structured around a meaningful and interesting theme or topic. 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; and

must include a capstone experience.

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 College of Education Curriculum Committee, and the College of Education Associate Dean for Academic Affairs.

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.

Certificates of Undergraduate Study

Culturally Relevant Teaching (15)

This certificate is designed for educator licensure candidates to enhance their understanding of the diversity of cultures they can expect in their future classrooms. Candidates will learn to provide culturally relevant pedagogy while expanding the principles of universal design to improve learning for all students. This certificate is open to any NIU student who intends to pursue or who has been admitted to educator licensure.

All course requirements for this certificate must be completed at NIU within three calendar years. Students pursuing this certificate 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 certificate requirements before the certificate is listed on the transcript.

Requirements

*EPFE 201 - Education as an Agent for Change (3)

*EPFE 440 - Education for Social Justice (3)

*LTIC 301 - Teaching with a Multicultural Perspective (3)

*LTIC 400 - Introduction to Teaching English Language Learners (3)

*SESE 320 - Disability in Film (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.

* Available for general education credit.

* Fulfills the Human Diversity Requirement.

Department of Counseling and Higher Education (CAHC, HESA, SCL)

The Department of Counseling 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 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.

Minor in Social Change Leadership

The minor in social change leadership offers students the opportunity to acquire knowledge and skills related to the theory and practice of leadership across various contexts. The minor is designed to complement a wide range of academic majors to better prepare students for professional and personal success post-graduation. The social change approach to leadership focuses on examining the intersection of social justice, ethics, and collaboration in the practice of leadership in order to promote positive social change. The minor focuses on developing critical self-reflection, analytical skills, and communication skills through the application of leadership in various contexts including student organizations, service learning, internships, and a capstone project.

Students must complete 18 semester hours for this minor and are urged to complete SCL 100 and EPFE 302 as early as possible. Elective courses for the minor are chosen to complement the student's background, interests, and career plans, and, in some instances help satisfy knowledge domain requirements in the general education program. The culminating course for the minor is SCL 498, in which students will develop and implement a capstone project. The capstone project could be an intensive case study, research paper, action research project, or other scholarly work in social change leadership.

Required Courses (12)

EPFE 302 - Advocacy, Justice, and Leadership in a Diverse Society (3)

*SCL 100 - Foundation of Social Change Leadership (3)

SCL 200 - Application of Social Change Leadership (3)

SCL 492 - Capstone in Social Change Leadership (3)

Elective Courses (6)

BKST 200 - Racism in American Culture and Society

EPFE 300 - Ethics, the Law and Educational Policy (3)

¹HESA 490 - Workshop in Higher Education and Student Affairs (1-3)

¹HESA 497 - Independent Study (1-3)

LEEA 329 - Spiritually-Centered Leadership (3)

NNGO 100 - Community Leadership and Civic Engagement (3)

PSPA 320 - Public Service Leadership (3)

SCL 486 - Internship in Social Change Leadership (1-3)

SCL 493 - Leadership in the College Experiences (3)

WGSS 101 - Women, Sex, and Gender Today

WGSS 350 - Lesbian, Gay, Bisexual and Transgender Studies

Courses not listed above may be used to satisfy elective requirements when the topic is appropriate and approved by the social change leadership minor coordinator.

Course List

Higher Education and Student Affairs (HESA)

402. INTRODUCTION TO STUDENT AFFAIRS (3). Introduction to the field of student affairs through analysis of past and current issues and exposure to the historical, philosophical, and theoretical frameworks that support practice in the profession.

422. COLLEGE STUDENT DEVELOPMENT (3). Examines theories regarding college student learning and development including analysis of foundation theories as well as contemporary theories regarding college student development.

490. WORKSHOP IN HIGHER EDUCATION AND STUDENT AFFAIRS (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.

492. SPECIAL TOPICS IN HIGHER EDUCATION AND STUDENT AFFAIRS (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.

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 (CAHC)

211. CAREER PLANNING (3). Presentation of career development and career decision making as lifelong processes. Discussion of the relationship of individuals to their work. Practice in decision making and application of learned skills to personal, academic, and career planning. Not open to students with credit in ACCY 370, FINA 395, MGMT 395, MKTG 395, or OMIS 300.

400. EXPLORATION IN THE COUNSELING PROFESSION (3). Training in facilitative communication skills and attention to one's relationship with the helping occupations in the community.

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

425. HUMAN RELATIONS SKILLS AND STRATEGIES (3). Overview of research and practice of human relations, strategies, and helping skills related to working with diverse individuals and groups. Strategies and skills practiced through experiential exercises.

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.

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.

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.

* Available for general education credit.

¹ May be counted toward the minor when topic is appropriate.

Social Change Leadership (SLC)

100. FOUNDATION OF SOCIAL CHANGE LEADERSHIP (3). Introduction to the theoretical and philosophical foundations of social change leadership. Attention to ethical decision-making, development of critical self-reflection, and the role of collaboration and social responsibility in promoting social change.

200. APPLICATION OF SOCIAL CHANGE LEADERSHIP (3). Focuses on social change leadership styles and strategies through the analysis of case studies and social movements. Examines role of individual leadership, values, and strategies for advancing social justice, change, and responsibility.

486. INTERNSHIP IN SOCIAL CHANGE LEADERSHIP (1-3). Supervised experience for undergraduate students enrolled in the social change leadership minor. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

492. CAPSTONE IN SOCIAL CHANGE LEADERSHIP (3). Intensive case study, research paper, action research project, or other scholarly work in social change leadership. Development of capstone project for social change leadership minors. PRQ: Consent of department.

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, Adult and Higher Education Faculty

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

Adam W. Carter, Ph.D., University of North Carolina at Charlotte, assistant professor

Melissa Fickling, Ph.D., University of North Carolina at Greensboro, assistant professor

Teresa A. Fisher, Ph.D., University of Illinois, professor

LaVerne Gyant, Ed.D., Pennsylvania State University, professor

Xiaodan Hu, Ph.D., University of Florida, assistant professor

Dana Isawi, Ph.D., University of North Carolina at Charlotte, assistant professor

Katy S. Jaekel, Ph.D., Iowa State University, assistant professor

Carrie A. Kortegast, Ph.D., Iowa State University, assistant professor

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

Department of Curriculum and Instruction (LTCY, LTIC, LTLA, LTRE, MLTL, TLCI, TLEE)

The Department of Curriculum and Instruction offers course work in elementary education; middle level teaching and learning; 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 education, science education, teacher education, and multicultural education in addition to course work in curriculum and instruction.

The department offers the B.S.Ed. degree with either a major in elementary education, to prepare candidates to obtain professional educator licensure in grades 1-6; or a major in middle level teaching and learning, to prepare candidates to obtain professional educator licensure in grades 5-8, which meet State of Illinois approval. Candidates who successfully complete one of these programs and pass the state mandated Teacher Performance Assessment will have completed all required ISBE and CAEP standards for receiving university recommendation for licensure. Successful completion of one of these programs without receipt of a passing score on the state mandated Teacher Performance Assessment may result in the candidate receiving a degree without university recommendation for licensure in grades 1-6 (elementary education) or 5-8 (middle level grades).

Major in Elementary Education (B.S.Ed.)

The Bachelor of Science in Education (B.S.Ed.) degree in Elementary Education is designed to prepare future educators with the knowledge and pedagogical approaches necessary to serve the needs of young learners. The program has been designed so candidates choose one emphasis.

All students seeking admission are required to have an overall minimum NIU GPA of 2.75 and receive a grade of C or better in all professional education course work. Candidates seeking professional educator licensure must successfully complete the Illinois Licensure Testing System (ILTS) Test of Academic Proficiency (TAP), or equivalent recognized by the Illinois State Board of Education no later than the semester prior to student teaching. Candidates must also pass the Elementary Education (Grades 1-6) content area test (test code 197-200) prior to student teaching. See also "Educator Licensure Information."

All candidates pursuing the B.S.Ed. degree with a major in elementary education must choose an emphasis in one of the following: Bilingual/ESL, Elementary Mathematics Education, Reading Teacher, or Special Education. Course work in Bilingual/ESL, Reading Teacher and Special Education with the addition of an Illinois Professional Testing Standards (IPTS) test, leads to recommendation for additional endorsements on a teaching license. Candidates must complete all required course work for these endorsements.

Students who successfully complete the program will have completed all required ISBE and CAEP standards for educator licensure. However, to be licensed in the state of Illinois, students must also pass the EdTPA.

Retention

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/field experiences. All course requirements (in and outside the department and in the area of study) require a grade of C or better. Students are encouraged to maintain close contact with their advisers as the program is tightly sequenced.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (37-38)

*LTIC 301 - Teaching with a Multicultural Perspective (3)
 LTIC 420 - Methods and Materials for Teaching English Language Learners in the Content Areas (3)
 ^LTLA 341 - Language Arts in the Elementary School (3)
 LTRE 300 - Elementary School Developmental Reading Programs (3)
 LTRE 350 - Content Area Literacy for Elementary Education (3)
 TLEE 282/EPS 282X - 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 Education Professional Year I: Internship to Student Teaching (2)
 TLEE 385 - Differentiation in Elementary School Instruction: Field Experience with Diverse Learners (1)
 TLEE 461 - Seminar in Elementary School Training (1)
 TLEE 485 - Elementary Education Professional Year II: Student Teaching to Practitioner (10)

Requirements outside Department (57)

ARTE 383 - Teaching Art in Elementary Schools (3),
 OR MUED 360 - Fundamentals, Principles, and Practices in Elementary Music (3)
 *ECON 160 - Contemporary Economic Issues (3)
 OR *ECON 260 - Principles of Microeconomics (3)
 OR *ECON 261 - Principles of Macroeconomics (3)
 ^*EPFE 410 - Philosophy of Education (3)
 *EPS 300 - Educational Psychology (3)
 EPS 304 - Development of the Elementary School Child (3)
 EPS 450 - Classroom Management (2)
 ETR 430 - Classroom Assessment in Elementary Education (3)
 ETT 229 - Computers in Education (3)
 OR passing score on ETT Proficiency Examination.
 GEOG 201 - Introduction to Human Geography (3)
 OR *GEOG 202 - World Regional Geography (3)
 **HIST 260 - American History to 1865 (3)
 OR **HIST 261 - American History Since 1865 (3)
 KNPE 245 - Physical Education for Children (3)
 MATH 110 - College Algebra (3)
 *MATH 201 - Foundations of Elementary School Mathematics (3)
 MATH 402 - Methods of Instruction in the Mathematics Curriculum for Elementary School I (3)
 MATH 403 - Methods of Instruction in the Mathematics Curriculum for Elementary School II (3)
 *POLS 100 - American Government and Politics (3)
 OR *POLS 150 - Democracy in America (3)
 OR *POLS 210 - Introduction to Law and Courts (3)
 *PSYC 102 - Introduction to Psychology (3)
 SESE 240 - Introduction to Special Education (3)
 SESE 456 - Collaboration for Inclusive Teaching and Learning (3)

Candidates must complete one course from each of the following science areas: Biological, Physical, and Earth & Space Science. Science coursework must include at least *one laboratory* course.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

Biological Science Courses

- *BIOS 101 - Plant Products and Human Affairs (3)
- OR *BIOS 106 - Environmental Biology (3)
- OR *BIOS 107 - Evolution for Everyone (3)
- OR *BIOS 109 - Human Biology (3)
- OR *BIOS 103 - General Biology (3)
- OR *BIOS 103 - General Biology (3) and *BIOS 105 - General Biology Laboratory (1)

Physical Science Courses

- *CHEM 100 - Chemistry in Everyday Life (3)
- OR *CHEM 110 - Chemistry (3)
- OR *CHEM 110 - Chemistry (3) and *CHEM 111 - Chemistry Laboratory (1)
- OR *PHYS 150 - Physics (3)
- OR ENVS 301 - Environmental Sciences I: Physical Systems (3)

Earth and Space Science Courses

- *GEOG 101 - Introduction to Environmental Geography (3)
- OR *GEOG 101 (3) and *GEOG 102 - Introduction to Environmental Geography Laboratory (1)
- OR *GEOG 105 - Introduction to the Atmosphere (3)
- OR *GEOG 105 - Introduction to the Atmosphere (3) and *GEOG 106 - Introduction to the Atmosphere Laboratory Credits: 1
- OR *GEOL 103 - Planetary and Space Science (3)
- OR *GEOL 105 - Geologic Resources and the Environment (3)
- OR *GEOL 120 - Introductory Geology (3)
- OR *GEOL 120 - Planet Earth (3)
- AND *GEOL 121 - Planet Earth Laboratory (1)
- OR *PHYS 162 - Elementary Astronomy (3)

Select one of the following areas of study:

Emphasis 1. Bilingual/ESL (15)

The emphasis in Bilingual/ESL reflects the requirements of the Illinois State Board of Education and Teachers of English to Speakers of Other Languages (TESOL) standards. Successful completion of this emphasis as part of the elementary education major leads to the recommendation for the additional area of a Bilingual and/or ESL endorsement on a teaching license. The Bilingual endorsement requires the passing of a Target Language Proficiency Exam.

- *LTIC 400 - Introduction to Teaching English Language Learners (3)
- LTIC 435 - Teaching English language Learners in Bilingual Programs: Methods and Materials (3)
- *LTIC 445 - Applied Linguistics for Teachers of English Language Learners (3)
- LTIC 447 - Assessment of English Language Learners (3)
- LTLA 362 - Children's Literature in a Multicultural Society (3)

Emphasis 2. Elementary Mathematics Education (14)

The emphasis in Elementary Mathematics Education reflects standards established by the National Council of Teachers of Mathematics (NCTM). Successful completion of this emphasis as part of the elementary education major does not lead to the recommendation for an additional licensure area.

- *MATH 229 - Calculus I (4)
- MATH 302 - Introduction to Geometry (3)
- *STAT 200 - Elementary Statistics (4)
- One of the following (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)

Emphasis 3. Reading Teacher (15)

The Reading Teacher emphasis reflects the requirements of the Illinois State Board of Education and International Literacy Association standards. Successful completion of this emphasis as part of the elementary education major leads to the recommendation for the additional area of Reading Teacher endorsement on a

teaching license. The Reading Teacher endorsement requires the passing of the Reading Teacher Content Test (test code 177).

- LTLA 362 - Children's Literature in a Multicultural Society (3)
- LTRE 320 - Assessment of Diagnostic Reading Instruction (3)
- LTRE 330 - Practicum in Reading Diagnosis (3)
- LTRE 331 - Practicum in Problems of Teaching Reading (3)
- LTRE 401 - Practicum in Teaching Developmental Reading: Elementary Level (3)

Emphasis 4: Special Education (16)

The emphasis in Special Education reflects the requirements of the Illinois State Board of Education and the Council for Exceptional Children (CEC) standards. Successful completion of this emphasis as part of the elementary education major leads to the recommendation for the additional area of Learning Behavior Specialist I (LBS1) endorsement on a teaching license. Additional course work is required for this endorsement. The Special Education endorsement requires the passing of the Learning Behavior Specialist I Exam (test code 155).

- ETR 434 - Assessment in Special Education (3)
- ^SESE 415 - Instructional Methods for Elementary Students with Mild Disabilities: Reading, Language Arts (4)
- SESE 417 - Positive Behavior Support and Classroom Management for Special Educators (3)
- SESE 446 - Methods for Supporting the Social/Emotional Development of Students with Emotional/Behavior Disorders (3)
- SESE 460 - Instructional Methods for Individuals with Autism and Developmental Disabilities (3)

Total Hours for a Major in Elementary Education: 123-129**Degree with Honors**

The Elementary Education Honors Program is designed to provide exceptional students an opportunity to conduct in-depth exploration and research of topics in education. 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.Ed. degree with honors in elementary education 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.

Junior and senior elementary education majors can achieve upper-division honors within the program in collaboration between the department and the University Honors Program. For juniors and seniors to be eligible for upper-division honors, they must maintain a 3.20 overall GPA and a minimum 3.20 GPA in courses required in Elementary Education. Admission to upper-division honors program requires the approval of the departmental undergraduate adviser 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 elementary education baccalaureate degree "With Upper-Division Honors" include a minimum of 12 semester hours of honors courses numbered 300 or above within the major, including a seminar (outside of the major), and a capstone. The senior capstone counts toward the required hours of honors work and includes an individual research activity with a faculty member. Furthermore, 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 department and the university

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

honors program. Note: Most department 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.

Major in Middle Level Teaching and Learning (B.S.Ed.)

The Bachelor of Science in Education (B.S.Ed.) degree in Middle Level Teaching and Learning is an interdisciplinary program designed to prepare future practitioners with the content knowledge and pedagogical approaches necessary to serve the needs of young adolescent learners in specific disciplines for teacher licensure in middle level education. As a condition for obtaining a middle level teaching license (grades 5-8) in Illinois, candidates prepare for teaching in one major content area endorsement: English Language Arts, Mathematics, Science, or Social Sciences. In addition, the program has been designed so that candidates will earn endorsement in an additional area.

All students seeking admission are required to have an overall minimum NIU GPA of 2.50. Additionally, students must obtain a grade C or better in all foundational studies general education courses: EPS 300, EPS 382, and EPS 419. These requirements must be met prior to enrollment in MLTL 302, Clinical Experience in Middle Level Curriculum and Instruction. Candidates seeking professional educator licensure must successfully complete the Illinois Licensure Testing System (ILTS) Test of Academic Proficiency (TAP), or equivalent recognized by the Illinois State Board of Education no later than the semester prior to student teaching. Candidates must also pass the content tests required by their licensure field prior to student teaching. See also "Educator Licensure Information."

Special Requirements

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.

Middle level education students must successfully complete all professional course work with a grade of C or better, or S, to continue to enroll in any of the professional courses.

Retention

Retention in the middle level education program is contingent upon maintaining a NIU cumulative GPA of 2.50 or higher, having a grade of C or better in all professional education courses, and successful completion of all clinical experiences. All course requirements (in the major content area option and minor content area option) require a grade C or better.

Students who successfully complete the program will have completed all required ISBE and CAEP standards for educator licensure.

Professional Education Requirements (49)

- ^ENGL 404A - Theory and Research in Written Composition: English Language Arts (3),
OR ^ENGL 404B - Theory and Research in Writing Composition: Middle Level Content Areas (3)
- **EPFE 201 - Education as an Agent for Change (3)
- *EPS 300 - Educational Psychology (3)
- EPS 382 - Educational Participation in Clinical Experiences: Middle Level Education (1)
- EPS 419 - The Middle School Child (3)
- EPS 450 - Classroom Management (2)
- ETRA 422 - Technology and Assessment for Middle Level Education and Secondary Education (4)
- LTIC 420 - Methods and Materials for Teaching English Language Learners in the Content Areas (3)
- ^LTRE 311- Content Area Literacy Instruction (3)

- MLTL 302 - Clinical Experience in Middle Level Curriculum and Instruction (1)
- MLTL 303 - Clinical Experience in Middle Level Curriculum and Instruction (1)
- MLTL 304 - Middle Level Curriculum and Instruction: Field Experience (1)
- MLTL 485 - Student Teaching (11)
- MLTL 461 - Seminar in Middle Level Student Teaching (1)
- SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)
- TLCI 422 - Middle School Organization and Instruction (3)
- One of the following in the major content area (3)
 - GEOL 483/BIOS 402X/CHEM 493X/ENVS 483X/PHYS 493X - Interdisciplinary Teaching of Science in Secondary and Middle Level Education (3)
 - LTLA 350 - Language Arts in the Middle School (3)
 - MATH 404 - Methods of Instruction in the Mathematics Curriculum for Middle School I (3)
 - MLTL 432 - Methods and Materials of Instruction for Middle School Social Science (3)

Requirements for Endorsement in One of the Following Major Content Areas:

Major Content Area Option: English Language Arts (33)

- 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 - Readings in Shakespeare (3),
OR ^ENGL 407 - Shakespeare (3)
- ^ENGL 322 - Language in American Society (3)
- ^ENGL 479 - Theory and Research in Literature for English Language Arts (3)
- ^ENGL 480B - Materials and Methods for Teaching English Language Arts: At the Middle Level (3)
- LTLA 363 - Young Adult Literature in a Multicultural Society (3)
- LTRE 305 - Teaching Reading in the Middle Schools (3)
- One of the following in American Literature (3)
 - ^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)

Major Content Area Option: Mathematics (29-31)

- *MATH 155 - Trigonometry and Elementary Functions (3)
- *MATH 229 - Calculus I (4)
- MATH 302 - Introduction to Geometry (3)
- MATH 303 - Introduction to Number Theory (3)
- ^MATH 410 - Methods of Instruction in the Mathematics Curriculum for Middle School (3)
- MATH 416 - Topics in Mathematics for Teachers (3)
- *STAT 200 - Elementary Statistics (4)
- Two of the following:
 - *MATH 210 - Finite Mathematics (3)
 - MATH 230 - Calculus II (4)
 - MATH 232 - Calculus III (4)
 - MATH 304 - History of Mathematics through the 17th Century (3)
 - MATH 336 - Ordinary Differential Equations (3)
 - MATH 360 - Model Building in Applied Mathematics (3)

Major Content Area Option: Science (33)

- 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)
- *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)
- *GEOL 120 - Planet Earth (3) AND *GEOL 121 - Planet Earth Laboratory (1)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

GEOL 475/BIOS 484X/CHEM 490X/ENVS 475X/PHYS 490X - Science across Time and Culture (2)

*PHYS 210 - General Physics I (4)

*PHYS 211 - General Physics II (4)

PHYS 495/CHEM 495X/GEOL 495X - Teaching of Physical Sciences (3)

Major Content Area Option: Social Science (34)

ECON 425 - Economic Education (3),

OR *ECON 160 - Contemporary Economic Issues (3)

*GEOG 101 - Survey of Physical Geography (3)

GEOG 102 - Survey of Physical Geography (1)

**GEOG 202 - World Regional Geography (3)

**HIST 170 - World History I: Problems in the Human Past (3)

*HIST 171 - World History II: Problems in the Human Past (3)

**HIST 260 - American History to 1865 (3)

*HIST 261 - American History since 1865 (3)

HIST 359 - History of Illinois (3)

HIST 496 - History and Social Science Instruction for Secondary and Middle Grades Educators (3)

*POLS 100 - American Government and Politics (3)

*POLS 150 - Democracy in America (3)

Requirements for Endorsement in One of the Following Minor Content Areas:

Minor Content Area Option: Art (25)

ARTE 200 - Studio Foundations for Art and Design Educators (3)

ARTE 343 - Art and Technology in the K-12 Classroom (3)

^ARTE 344 - Development of Resources and Methods in Art Design Education: Content and Clinical Experience at the Middle Level (4)

ARTE 384 - History and Philosophy of Art Education (3)

ARTE 387 - Assessing Art and Design Learning K-12 (3)

^ARTE 463 - Reading and Writing in Art and Design Education: Critical Approaches (3)

ARTS or ARTD elective at the 300 level or above (3)

ARTH elective at the 300 level or above (3)

Minor Content Area Option: English Language Arts (24)

ENGL 200 - Literary Study: Research and Criticism (3)

ENGL 207 - Fundamentals of English Grammar (3)

^ENGL 300C - Advanced Essay Composition: English Licensure in Teaching (3)

^ENGL 322 - Language in American Society (3)

^ENGL 480 - Materials and Methods of Teaching English Language Arts (3)

LTAL 363 - Young Adult Literature in a Multicultural Society (3)

LTRE 305 - Teaching Reading in the Middle Schools (3)

One of the following (3)

^*ENGL 315 - Readings in Shakespeare (3),

OR ^ENGL 407 - Shakespeare (3)

ENGL 413 - The Romantic Period (3)

^ENGL 414 - The Victorian Age (3)

^ENGL 470 - The English Novel to 1900 (3)

Minor Content Area Option: Family and Consumer Science (26)

FACS 450 - Workshop in Family and Consumer Sciences (3)

FSMD 152 - Fiber and Fabric Analysis I (3),

OR FSMD 258 - Introduction to the Fashion Industry (3)

*HDFS 207 - The Consumer (3)

*HDFS 230 - Child Development (3),

OR HDFS 280 - Human Development, the Family, and Society (3)

HDFS 284 - Introduction to Family Relationships (3)

NUTR 200A - Principles of Food Preparation (3) and current State of Illinois Sanitation Certificate

NUTR 200B - Food Preparation Laboratory (2)

*NUTR 201 - Human Nutrition (3)

OR NUTR 405 - Child Health and Nutrition (3)

Minor Content Area Option: Foreign Language Spanish (24)

FLSP 102 - Beginning Spanish II (3)

FLSP 201 - Intermediate Spanish I (3)

FLSP 202 - Intermediate Spanish II (3)

FLSP 211 - Intermediate Spanish Conversation

OR FLSP 215 - Spanish for Heritage Speakers I (3)

FLSP 301 - Advanced Spanish Grammar (3)

FLSP 311 - Advanced Spanish Conversation (3)

FLSP 361 - Spain Today

OR FLSP 362 - Latin America Today (3)

FLMT 490 - Foreign Language Teaching Methods for the Elementary and Middle Schools (3)

OR FLMT 491 - Foreign Language Teaching Methods for the Middle and High Schools (3)

Minor Content Area Option: Health Education (24)

*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 315 - Introduction to Health Promotion

PHHE 400 - Methods and Materials in School Health Education (3)

PHHE 402 - Community Health Programs and Issues (3)

PHHE 404 - Drugs in Society (3)

^PHHE 406 - Dimensions of Human Sexuality (3)

^PHHE 408 - Mental and Emotional Health (3)

Minor Content Area Option: Learning Behavior Specialist-1 (24)

ETR 434 - Assessing Students with Special Needs (3)

SESE 240 - Introduction to Special Education (3)

SESE 417 - Positive Behavior Support and Classroom Management for Special Educators (3)

SESE 444 - Instructional Methods and Strategies for Middle and Secondary Students with Mild Disabilities (3)

SESE 446 - Methods for Supporting the Social/Emotional Development of Students with Emotional/Behavior Disorders (3)

SESE 448 - Planning for the Transition from School to Employment, Career and Postsecondary Education for Students with Disabilities (3)

SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)

SESE 460 - Instructional Methods for Individuals with Autism and Developmental Disabilities (3)

Minor Content Area Option: Mathematics (26)

*MATH 155 - Trigonometry and Elementary Functions (3)

*MATH 229 - Calculus I (4)

MATH 302 - Introduction to Geometry (3)

MATH 303 - Introduction to Number Theory (3)

MATH 404 - Methods of Instruction in the Mathematics Curriculum for the Middle School I (3)

^MATH 410 - Methods of Instruction in the Mathematics Curriculum for the Middle School II (3)

MATH 416 - Topics in Mathematics for Teachers (3)

*STAT 200 - Elementary Statistics (4)

Minor Content Area Option: Physical Education (24)

*KNDN 351 - Multicultural Dance (3)

KNPE 235 - Fundamental Sport Skills (3)

KNPE 302 - Assessment in Physical Education School Settings (3)

KNPE 335 - Developmental Skill-Based Approach to Teaching (3)

KNPE 340 - Growth and Motor Development (3)

KNPE 364 - Fitness Education Methods for K-12 Students (3)

KNPE 365 - Introduction to Adventure Education (3)

OR KNPE 368 - Sport Education (3)

KNPE 421 - Curriculum Designs in Middle and High School Physical Education (2)

KNPE 492 - Special Physical Education Clinic Practicum (1)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

Minor Content Area Option: Science (24)

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 402X/CHEM 493X/ENVS 483X/GEOL 483/PHYS 493X - Interdisciplinary Teaching of Science in Secondary and Middle Level Education (3)
 BIOS 484X/CHEM 490X/ENVS 475X/GEOL 475/PHYS 490X - Science across Time and Culture (2)
 *CHEM 210 - General Chemistry I (3) AND *CHEM 212 - General Chemistry Laboratory I (1)
 *GEOL 120 - Planet Earth (3) AND *GEOL 121 - Planet Earth Laboratory (1)
 *PHYS 150 - Physics (3),
 OR *PHYS 210 - General Physics I (3)

Minor Content Area Option: Social Science (25)

*GEOG 101 - Introduction to Environmental Geography (3)
 GEOG 102 - Introduction to Environmental Geography Laboratory (1)
 **GEOG 202 - World Regional Geography (3)
 **HIST 170 - World History I: Problems in the Human Past (3)
 *HIST 171 - World History II: Problems in the Human Past (3)
 **HIST 260 - American History to 1865 (3)
 **HIST 261 - American History since 1865 (3)
 HIST 496 - History and Social Science Instruction for Secondary and Middle Grades Educators (3)
 *POLS 100 - American Government and Politics (3)

All other licensure content areas are K-12 and will specify 24-26 credit hours (including a methods class) for a minor content area option.

Additional Endorsement Option: Bilingual/ESL (18)

*LTIC 301 - Teaching with a Multicultural Perspective (3)
 *LTIC 400 - Introduction to Teaching English Language Learners (3)
 LTIC 420 - Methods and Materials for Teaching English Language Learners in the Content Areas (3)
 LTIC 435 - Teaching English Language Learners in Bilingual Programs: Methods and Materials (3)
 *LTIC 445 - Applied Linguistics for Teachers of English Language Learners (3)
 LTIC 447 - Assessment of English Language Learners (3)

Total hours for a Major in Middle Level Teaching and Learning: 102-109

Certificate of Undergraduate Study**Middle School Literacy (15)**

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. Candidates completing this certificate will acquire the skills 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 candidates admitted to degree or non-degree study at Northern Illinois University. Candidates 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. Candidates 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 (1-3). 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.

305. LANGUAGE DEVELOPMENT (3). Overview of oral language acquisition including typical and atypical phonological, morphological, syntactic, semantic, and pragmatic development beginning at infancy through beginning primary grades. Emphases on parallels between oral development and literacy acquisition, and on early childhood teaching strategies. PRQ: LTIC 445 or consent of department.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

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 and junior standing.

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.

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. SPECIAL TOPICS IN ADVANCED COLLEGE READING (1-3). Refinement of college reading comprehension skills including critical and analytical reading, reading flexibility, acquisition of vocabulary, and organizational structures common to specific disciplines. Students may enroll in course more than once each semester for up to 3 credits within the same semester.

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, and at least sophomore standing.

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. ASSESSMENT OF READING (3). Use of standardized and informal assessments of reading, oral language, and spelling for diagnostic reading instruction to address individual differences. CRQ: LTRE 300, 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: LTRE 320, 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. CRQ: LTRE 330, GPA of at least 2.75 and senior standing.

350. CONTENT AREA LITERACY FOR ELEMENTARY EDUCATION (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 331, GPA of at least 2.75 and senior standing.

431. TECHNIQUES OF TUTORING AND LEARNING ASSISTANCE (3). 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.

Middle Level Teaching and Learning (MLTL)

302. CLINICAL EXPERIENCE IN MIDDLE LEVEL CURRICULUM AND INSTRUCTION (1). Pre-student-teaching practicum. Observation and analysis of the integration of literacy instruction in middle level content area classrooms and adaptations of instruction for students with exceptional needs. Design, implementation, and evaluation of lesson plans. Requires a minimum of 16 clock hours in the classroom per semester hour. Concurrent enrollment in SESE 457 and LTRE 311 required. S/U grading. PRQ: EPS 382 and consent of department.

303. CLINICAL EXPERIENCE IN MIDDLE LEVEL CURRICULUM AND INSTRUCTION (1). Pre-student-teaching practicum. Observation of middle school philosophy and integration of instructional approaches for teaching diverse populations in middle level classrooms. Design, implementation, and evaluation of lesson plans. Requires a minimum of 16 clock hours in the classroom per semester hour. Concurrent enrollment in TLCI 422 and LTIC 420 required. S/U grading. PRQ: MLTL 302.

304. MIDDLE LEVEL CURRICULUM AND INSTRUCTION: FIELD EXPERIENCE (1). Pre-student-teaching practicum. Methodology related to practice through teaching experiences in middle 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. To be taken in conjunction with methods courses. S/U grading. PRQ: MLTL 303.

432. METHODS AND MATERIALS OF INSTRUCTION FOR MIDDLE LEVEL SOCIAL SCIENCE (3). Application of adolescent development theories, middle school standards, and programs for social science instruction of middle level students. Emphasis on social justice themes, knowledge of the middle level learner, integrated social science school curriculum, and pedagogical content knowledge.

461. SEMINAR IN MIDDLE LEVEL STUDENT TEACHING (1). Orientation to the middle level teaching profession, including school and community environment, professionalism, and effect of teaching on student learning. S/U grading. CRQ: MLTL 485. PRQ: MLTL 304 and senior standing.

485. MIDDLE LEVEL STUDENT TEACHING (11). Student teaching for one entire semester in middle level grades. Assignments to be arranged with the department. S/U grading. See "Educator Licensure Requirements." PRQ: MLTL 304.

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

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.

Elementary Education (TLEE)

282. EDUCATIONAL PARTICIPATION IN CLINICAL EXPERIENCES: ELEMENTARY EDUCATION (1). *Crosslisted as EPS 282X*. Pre-student teaching practicum. Observation, assessment, and analysis of child development and behavior. Observation and analysis of curriculum, instruction, assessment, and classroom management in culturally/economically diverse classrooms. Design, implementation, and evaluation of lesson plans. Requires a minimum of 16 clock hours working directly with elementary grad students and teachers to apply information and skills learned in college courses to classroom settings. S/U grading. PRQ: Consent of elementary education adviser. Concurrent enrollment in EPS 304 is required.

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 (1-6). 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 or EPS 282X, EPFE 410, and LTIC 301.

383. ELEMENTARY EDUCATION PROFESSIONAL YEAR I: INTERNSHIP TO STUDENT TEACHING (2). Pre-student teaching practicum to be taken in conjunction with methods courses. 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 385 and LTRE 350. CRQ: TLEE 344 and ETR 430.

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 and EPS 450. CRQ: LTIC 420.

402X. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR ELEMENTARY SCHOOL I (3). *Crosslisted as MATH 402*. Methods, techniques, materials, curricular issues, learning theories, and research utilized in the teaching of elementary school mathematics. Intended for students in the elementary educator licensure program. Accepted for credit as an elementary mathematics methods course, but not as an upper-division mathematics 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.

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. ELEMENTARY EDUCATION PROFESSIONAL YEAR II: STUDENT TEACHING TO PRACTITIONER (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.

Curriculum and Instruction Faculty

Sally Blake, Ph.D., University of Mississippi, professor, chair

Brenda Aranda, Ph.D., University of Texas at El Paso, assistant professor

James A. Cohen, Ph.D., Arizona State University, associate 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

Joseph Flynn, Ph.D., Michigan State University, associate professor

Mary Beth Henning, Ph.D., Pennsylvania State University, professor

Melanie D. Koss, Ph.D., University of Illinois, Chicago, associate professor

Jodi Lampi, Ph.D., Texas State University, assistant professor

Eui-kyung Shin, Ph.D., University of South Carolina, professor

Peet Smith, Ph.D., University of Maryland, assistant professor

John Evar Strid, Ph.D., Northwestern University, associate professor

Melanie Walski, Ph.D., University of Illinois at Chicago, assistant professor

Donna E. Werderich, Ed.D., Northern Illinois University, associate professor
Corrine M. Wickens, Ph.D., Texas A&M University, associate professor

Elizabeth Wilkins, Ph.D., Southern Illinois University, professor

C. Sheldon Woods, Ph.D., Kansas State University, associate professor

Department of Educational Technology, Research and Assessment (ETR, ETT, ETRA)

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. The department also offers a B.S. degree completion program in Applied Management with emphasis in Instructional Technology, Training, and Evaluation. The program 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.

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 (1) holding an A.A.S. in a discipline directly related to the program emphasis, or students holding an A.A./A.S. degree, and (2) who can demonstrate that they have significant professional experience related to the program emphasis. Admission will be determined by the appropriate program emphasis faculty. All majors must meet NIU's requirements for general education (21-33 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.

B.S. in Applied Management Degree Completion Program

The B.S. in Applied Management degree completion program is designed to award credit to practicing professionals for their recent education and previous learning experiences in the area relevant to the proficiency credit being requested. In addition to the course requirements outlined below, up to 30 semester hours of credit may be awarded for documented prior learning through professional experiences and non-traditional learning in an area related to the emphasis. Credit will be awarded based on evaluation of a professional portfolio. These credits will be held in "escrow" and will be posted to the student's transcript upon the completion of all designated 300- and 400-level course work for the applied management degree. Students interested in the B.S. in Applied Management degree completion program should contact a program adviser for a preadmission interview and course counseling session. Attained proficiency credits may be used for the majoring emphasis only, and may not be applied to other emphases in the B.S. in Applied Management degree program.

Core Requirements (21)

ACCY 288 - Fundamentals of Accounting (3)
ETR 340 - Survey Methods for Training and Evaluation (3)
ETR 431 - Program/Performance Evaluation (3)
ETT 311 - Instructional Media Literacy, Prototyping and Publication (3)
ETT 329 - Learning in the Digital Age (3)
ETT 464 - Human Performance Technology (3)
ETT 490 - Workshop in Instructional Technology (3)

Emphasis in 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.

This is primarily an online program.

Additional Required Courses (19)

ETR 450 - Data Analysis for Design and Evaluation (3)
ETR 492 - Special Topics in Research and Assessment (3)
OR ETR 497 - Independent Research in Research and Assessment (3)
ETT 310 - Instructional Design Models, Strategies and Tactics (3)
ETT 448 - Instructional Architecture for Learning Applications (3)
ETT 459 - Learner-Centered Educational Courseware Development (3)
ETT 492 - Special Topics in Instructional Technology (3)
OR ETT 497 - Independent Study in Instructional Technology (3)
ETRA 490 - Professional Portfolio 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 in Instructional Technology, Training and Evaluation: 40

Certificate of Undergraduate Study

eLearning Design (12)

This certificate of undergraduate study in eLearning design is designed to provide students in all majors a set of four courses focused on exploring new learning environments integrated with enhanced technology while developing skills to understand the theories and practice of eLearning design. Students will examine the conceptual and technical basis of eLearning design and obtain hands-on experience with various interactive technologies and use of survey methods for evaluation purposes.

Requirements

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. With department approval, courses may be applied toward undergraduate degree requirements in the department. Students interested in the certificate should apply no later than the beginning of their final semester prior to graduation. Applications are available in the Department of Educational Technology, Research and Assessment.

Required Courses (12)

ETR 340 - Survey Methods for Training and Evaluation (3)
 ETT 329 - Learning in the Digital Age (3)
 ETT 439 - Developing Educational Software (3)
 ETT 492 - Special Topics in Instructional Technology (3) (when topics are related to eLearning Design)

Course List

Instructional Technology (ETT)

211. TECHNOLOGY IN A DIVERSE SOCIETY (3). Access, evaluation, and utilization of instructional and social media for various cultures and countries. Topics include appropriateness of technology for diverse audiences, analysis of technology for instructional environments, and analysis of technology for social environments.

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, without permission of their major department.

231. DIGITAL VISUAL LITERACY FOR LEARNING (3). Exploration of the historical background and practice involved in digital visual literacy. Review the use and design of various digital media communications. Develop understanding of the interpretation of digital visual literacy. Create and integrate digital visual literacy into professional practice for various audiences.

234. LEARNING WITH TECHNOLOGY (3). Overview of current and emerging interactive technology (hardware and software) used to support learning in various settings. Reviews the development of technology tools for learning in different settings from the past to current technologies with hands-on experience with these technologies.

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.

329. LEARNING IN THE DIGITAL AGE (3). Survey of emerging technologies and tools that are transforming our society and schools, as well as the implications these changes have for learning. Emphasis on the skills and knowledge students need to learn effectively and live productively in an increasingly global and digital world.

358. MOBILE LEARNING DESIGN AND DEVELOPMENT (3). Provides an overview of mobile technologies used to support learning. Explores the strategies for developing, evaluating, and integrating effective mobile learning in a variety of settings.

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 461.

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.

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. Multiple enrollments with different subjects are allowed in the same semester.

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)

230. PROGRAM EVALUATION IN THE DIGITAL AGE (3) Examination of models and methods for the evaluation of technology-enhanced human learning environments (e.g., instructional technology, online training, digital media and learning objects, and technology-enhanced assessments). Survey of evaluation types, quantitative and qualitative evaluation methods (sampling, instrumentation, and data analysis), evaluation issues related to working with stakeholders and ethics, and evaluation communication and reporting. Emphasis on evaluation proposal development.

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.

451. COMMUNITY-BASED AND PARTICIPATORY ACTION RESEARCH (3). Introduction to theories and practice of Participatory Action Research (PAR) and Community-based research. Emphasis on hands-on fieldwork in a community setting to investigate a particular issue or problem.

492. SPECIAL TOPICS IN RESEARCH AND ASSESSMENT (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies. Multiple enrollments with different subjects are allowed in the same semester.

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 (ETRA)

422. TECHNOLOGY AND ASSESSMENT FOR MIDDLE LEVEL AND SECONDARY EDUCATION (4). Equips educators with skills pertaining to technology integration, assessment and evaluation of effective instruction, with a focus on theory and practice behind successful technology implementation in education. Issues such as designing instruction for the learner, fostering interactive learning, assessment process, and measuring successful implementation will be examined and discussed.

490. PROFESSIONAL PORTFOLIO ASSESSMENT (1). Introduction to instructional theory and the process of producing a prior learning assessment portfolio of learning in non-traditional settings such as workplace, community, and volunteering. Up to 30 credit hours may be awarded by a faculty committee in the emphasis area as documented in the portfolio. Must be taken in the first year. PRQ: Bachelor of Science in Applied Management major with an emphasis on instructional technology, training and evaluation (BSAM-ITTE) and consent of the department.

Educational Technology, Research and Assessment Faculty

Wei-Chen Hung, Ph.D., Indiana University, professor, chair
Cynthia S. Campbell, Ph.D., Southern Illinois University, associate professor

Vicki L. Collins, Ph.D., University of Oregon, assistant professor
Fatih Demir, DCD, University of Baltimore, assistant professor
Pi Sui Hsu, Ph.D., Pennsylvania State University, associate professor

Rebecca Hunt, Ph.D., University of Toledo, associate professor
Laura Ruth Johnson, Ph.D., University of California at Berkley, associate professor

Olha Ketsman, Ph.D., University of Nebraska, Lincoln, clinical assistant professor

Kyung Kim, Ph.D., Pennsylvania State University, assistant professor

Yanghee Kim, Ph.D., Florida State University, professor
Hayley J. Mayall, Ph.D., University of Connecticut, associate professor

Todd D. Reeves, Ph.D., Boston College, assistant professor
Jason Rhode, Ph.D., Capella University, assistant professor

Thomas J. Smith, Ph.D., University of Illinois, professor
David A. Walker, Ph.D., Iowa State University, professor
Ying Xie, Ph.D., Pennsylvania State University, associate professor

Cynthia York, Ph.D., Purdue University, associate 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 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. physical education K-12 program is designed for students who plan to teach physical education at the elementary, intermediate, or secondary level. Students who receive physical education K-12 licensure may add endorsement(s) to current license. 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 to prepare students for professional opportunities/further studies in health behavior/promotion, sport performance, sport management, and cardiac rehabilitation settings. The program provides a rigorous program of study combining classroom, laboratory, field experiences, and a culminating internship that develop 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.

Major in Physical Education (B.S.Ed.)

This physical education major is designed to prepare educator licensure candidates to teach physical education in grades kindergarten through 12th grade (PE K-12). Students must take KNPE 200, KNPE 203, KNPE 235, and KNPE 340 within the first 15 semester hours of their program. 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.

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 foundational studies requirements (12 credit hours), and pass the ILTS Test of Academic Proficiency (TAP) or a minimum

composite score or higher as set by the State of Illinois on the ACT Plus Writing. These requirements must be met no later than the semester prior to student teaching (KNPE 483, KNPE 484, KNPE 485). 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 203, KNPE 235, KNPE 302, KNPE 303, KNPE 335, KNPE 340, KNPE 343, KNPE 344, KNPE 348, KNPE 364, KNPE 365, KNPE 368, KNPE 421, KNPE 449, KNPE 466, KNPE 467, KNPE 468, KNPE 490, and KNPE 492. Students are encouraged to maintain close contact with their advisers as the teacher preparation program in physical education is tightly sequenced.

Candidates who successfully complete the program and pass the state mandated Teacher Performance Assessment will have completed all required ISBE and CAEP standards for receiving university recommendation for licensure. Successful completion of the program without receipt of a passing score on the state mandated Teacher Performance Assessment may result in the candidate receiving a degree without university recommendation for licensure.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (64-65)

#KNDN 351 - Multicultural Dance (3)
 KNPE 200 - Introduction to Teaching Physical Education (2)
 KNPE 203 - Practicum in Physical Education (1)
 KNPE 235 - Fundamental Sport Skills (3)
 KNPE 302 - Assessment in Physical Education School Settings (3)
 KNPE 303 - Clinical Experience in Physical Education II (1)
 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),
 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 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 (16-17)

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 311 - Content Area Literacy Instruction (3),
 *LTIC 301 - Teaching with Multicultural Perspective (3)
 Fulfillment of requirements for educator licensure (See program
 director.)

Total Hours for Major in Physical Education: 80-82

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 (73)

KNPE 202 - Introduction to Athletic 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 350 - Principles and Techniques of Resistance Training (3)
 KNPE 427 - Clinical Proficiencies in Athletic Training: Therapeutic Exercise and Rehabilitation (2)
 KNPE 432 - Organization and Administration Concepts 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 463 - Exercise and Physical Activity across the Lifespan (3)
 *KNPE 474 - Medical Issues in Athletic Training (3)
 KNPE 489 - Internship in Athletic Training (6)
 ^KNPE 491 - Therapeutic Exercise (3)
 KNPE 493 - Supervised Clinical Experience in Exercise Gerontology (2)

Requirements outside Department (23-24)

BIOS 103 - General Biology (3) and BIOS 105 - General Biology Laboratory (1),
 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)
 HSCI 318 - Medical Terminology (3)
 NUTR 306 - Nutrition in Relation to Health and Exercise (3),
 OR NUTR 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: 95-96

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 314, KNPE 445, KNPE 452, KNPE 463, and the university's foundational studies in quantitative literacy.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (42)

KNPE 300 - Field Experience in Kinesiology (1)
 *KNPE 301 - Introduction to Kinesiology (3)
 ^KNPE 310 - Psychological Aspects of Sport and Exercise (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 (2)
 KNPE 494 - Internship in Kinesiology (6)
 LESM 438 - Sport Management Strategies (3),
 OR LESM 442 - Promotion and Marketing of Sport Programs (3)

One of the following areas of study (10)

Wellness Focus (10):
 KNPE 461 - Physical Activity and Wellness (3)
 KNPE 462 - Clinical Exercise Physiology (4)
 ^KNPE 464 - Scientific Basis of Exercise Prescription and Progression (3)
 Performance Focus (10):
 KNPE 461 - Physical Activity and Wellness (3)
 KNPE 470 - High Performance Development (4)
 KNPE 472 - Periodization for Performance Enhancement (3)
 Sport Management Focus (10):
 LESM 341 - Administration of Intercollegiate Athletics (1)
 LESM 360 - Sport Event and Facility Management (3)
 ^*LESM 365 - Communication Strategies in Sport (3)
 LESM 438¹ - Sport Management Strategies (3),
 OR LESM 442¹ - Promotion and Marketing of Sport Programs (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)

* Available for general education credit.

* Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

¹ Select the course that was not taken as part of the requirements in the department.

NUTR 306 - Nutrition in Relation to Health and Exercise (3),
 OR NUTR 306 Nutrition in Relation to Health and Exercise (2)
 and KNPE 306 - Sports Nutrition (1)
 *PSYC 102 - Introduction to Psychology (3),
 OR PSYC 219 - Positive Psychology (3)

Total Hours for a Major in Kinesiology: 70-71

Accelerated B.S in Kinesiology/M.S. in Athletic Training

The five-year accelerated program leads to both the B.S. degree in Kinesiology and M.S. degree in Athletic Training. Students who want to complete this program must identify themselves to the Department of Kinesiology and Physical Education as undergraduate majors and gain successful entry to the M.S.A.T. program. Admission to the M.S.A.T. program will be on a competitive basis, and the likelihood of admission will depend on the number and quality of the applicants to the program.

Eligibility requirements for application to the M.S.A.T. program through the accelerated B.S. in Kinesiology program are:

- Undergraduate majoring in kinesiology
- Completion of at least 90 semester hours of undergraduate designated course work as approved by adviser
- Minimum of 3.00 GPA
- Completion of all application requirements, including application to the graduate school, statement of purpose, resume, three letters of recommendation, minimum of 50 observation hours with a BOC certified athletic trainer within the last 10 months prior to application, and transcripts for all college course work. Qualified applicants will undergo a preadmission interview. The GRE is not required for admission.

Curriculum

Students must complete 90 semester hours of undergraduate designated course work as approved by adviser for the accelerated B.S. in Kinesiology to M.S. in Athletic Training degree. Students must also complete KNPE 320 in lieu of KNPE 301 during these 90 semester hours. Students accepted into the M.S.A.T. degree will matriculate in the M.S.A.T. program in the summer of their final undergraduate year. The graduate-level courses taken in the B.S./M.S. degree are the same as those taken in the stand-alone M.S.A.T. program. Up to 18 semester hours of the M.S.A.T. courses will be counted toward the 120 hours needed for the undergraduate degree. Students must complete all undergraduate requirements and receive their B.S. degree before the beginning of the spring semester of their fourth year. After completing all requirements required in the Graduate Catalog, students will receive their M.S.A.T. degree.

Students must gain successful entry to the M.S.A.T. program as well as all general education requirements by the end of their third year and have earned at least 102 semester hours. Beginning with the summer semester between their third and fourth year, students will start taking classes in the M.S.A.T. program as well as completing final university requirements. Successful completion of summer and fall courses will count toward the final 18 hours of the undergraduate degree.

Failure to meet requirements of the accelerated sequence may lead to a B.S. degree only, but only after all the requirements for that degree have been met.

Major in Sport Management (B.S.)

All students pursuing the B.S. degree with a major in sport management are required to have a university cumulative GPA of 2.50 or above and to have satisfactorily completed all required course work within the department prior to the culminating internship, LESM 486. Students are required to earn grades of C

or better in all courses with an LESM designator, as well as in the university's foundational studies in quantitative literacy. Students within this major are strongly encouraged to pursue a minor in sport sales, marketing, business administration, psychology, or other areas of interest.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (49)

KNPE 111 - Sport: Culture and Society (3)
 OR LESM 152 - Perspectives in U.S. Sport (3)
 KNPE 310 - Psychological Aspects of Sport and Exercise (3)
 KNPE 393 - Social Aspects of Sport (3)
 LESM 201 - Introduction to Sport Management (3)
 LESM 350 - Sport Sales and Sponsorship (3)
 LESM 360 - Sport Event and Facility Management (3)
 LESM 386 - Professional Development in Sport Management (1)
 LESM 438 - Sport Management Strategies (3)
 LESM 439 - Legal and Ethical Aspects of Sport (3)
 LESM 442 - Promotion and Marketing of Sport Programs (3)
 LESM 444 - Finance in the Sport Industry (3)
 LESM 486 - Internship in Sport Management (9-15)
 Electives in 300- and 400-level LESM courses (3-9)

Requirements outside Department (24)

ACCY 288 - Fundamentals of Accounting (3)
 ECON 260 - Principles of Microeconomics (3)
 MGMT 333 - Principles of Management (3)
 MKTG 310 - Principles of Marketing (3)
 MKTG 350 - Principles of Selling (3)
 OMIS 259 - Introduction to Business Information Systems (3)
 PSYC 102 - Introduction to Psychology (3)
 STAT 208 - Basic Statistics (3),
 OR STAT 301 - Elementary Statistics (3),
 OR STAT 350 - Introduction to Probability and Statistics (3)

Total Hours for Major in Physical Education: 73

Minor in Kinesiology and Physical Education

Option 1. Physical Education (24)

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.

*KNDN 351 - Multicultural Dance (3)
 KNPE 235 - Fundamental Sport Skills (3)
 KNPE 302 - Assessment in Physical Education School Settings (3)
 KNPE 335 - Developmental Skill-Based Approach to Teaching (3)
 KNPE 340 - Growth and Motor Development (3)
 KNPE 364 - Fitness Education Methods for K-12 Students (3)
 ^KNPE 365 - Introduction to Adventure Education (3)
 OR KNPE 368 - Sport Education (3)
 KNPE 421 - Curriculum Designs in Middle and High School Physical Education (2)
 KNPE 492 - Special Physical Education Clinic Practicum (1)

Option 2. Interdisciplinary (24-25)

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 301 - Introduction to Kinesiology and Sport Professions (3)
 ^KNPE 310 - Psychological Aspects of Sport and Exercise (3)
 KNPE 452 - Applied Physiology of Exercise (4)
 KNPE 346 - Methods of Group Fitness Instruction (3)
 OR KNPE 350 - Principles and Techniques of Resistance Training (3)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

Select from the following (7)

KNPE 470 - High Performance Development (4) and KNPE 472 - Periodization for Performance Enhancement (3)
OR KNPE 462 - Clinical Exercise Physiology (4) and ^KNPE 464 - Scientific Basis of Exercise Testing, Prescription and Progression (3)

Minor in Coaching (22-24)

This minor prepares students for the requirements for Illinois coaching certification through the Illinois High School Association 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 235 - Fundamental Sport Skills I (3)
^KNPE 310 - Psychological Aspects of Sport and Exercise (3)
KNPE 313 - Mechanical Kinesiology of Motor Skills (3),
OR KNPE 314 - Applied Kinesiology (4)
KNPE 335 - Developmental Skill-Based Approach to Teaching (3)
KNPE 350 - Principles and Techniques of Resistance Training (3)
KNPE 480 - Principles and Problems of Coaching (3)

Minor in Sport Management (18)

This minor prepares students for possible careers in the sporting industry. Students wishing to apply for the minor in sport management must complete an application by the semester deadline; applications and deadline dates are available in the Department of Kinesiology and Physical Education. Students in the sport management minor must receive a grade of C or better in each of the required courses and required electives. All university majors, including those housed in the Department of Kinesiology and Physical Education (with the exception of those who are declared sport management majors), may declare the minor in sport management.

LESM 201 - Introduction to Sport Management (3)
Three of the following (9)
LESM 438 - Sport Management Strategies (3)
LESM 439 - Legal and Ethical Aspects of Sport (3)
LESM 442 - Promotion and Marketing of Sport Programs (3)
LESM 444 - Finance in the Sport Industry (3)
Electives in sport management (LESM) from 300- and 400-level courses (6)

Minor in Sport Sales (18)

This minor prepares students for possible career in sport sales. The course work in this minor is rooted in applied and practical experiences (specifically in sport sales) for the student; and better prepares them for job placement in this area. All university majors, including those housed in the Department of Kinesiology and Physical Education, may declare the minor in sport sales.

Required Courses (15)

LESM 201 - Introduction to Sport Management (3)
LESM 350 - Sport Sales and Sponsorship (3)
LESM 451 - Sport Ticket Sales (3)
MKTG 295 - Principles of Marketing (3)
MKTG 350 - Principles of Selling (3)

One of the following (3)

MKTG 410 - Professional Selling and Cultural Perspectives (3)
MKTG 411 - Strategic Selling Perspectives (3)
MKTG 412 - Professional Selling in the Field (3)
MKTG 415 - Global Selling Perspectives (3)
MKTG 435 - Business-to-Business Selling (3)
MKTG 446 - Sales Leadership, Metrics, and Application (3)
MKTG 450 - Advanced Professional Selling (3)

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 (3). Analysis of movements and teaching strategies for multi-cultural dance. Promotes skill development in the dance forms and 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.

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.

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.

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.

115. BILLIARDS (1). Fundamental skills and techniques of billiards.

116. INTRODUCTION TO T'AI CHI (1). Elementary and intermediate t'ai chi postures with an emphasis on breathing technique and moving meditation.

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.

121. PICKLEBALL (1). Fundamental skills and techniques of pickleball.

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.

131. AIKIDO (1). Skills, techniques, and strategy of aikido.

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.

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.

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.

#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.

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.

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 the concepts and competencies of athletic training through supervised observations.

203. EARLY CLINICAL EXPERIENCE IN PHYSICAL EDUCATION (1). Introduction to teaching physical education for teacher candidates through structured observations in a partnership school district. CRQ: KNPE 200.

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.

233. CAREER DEVELOPMENT AND ACADEMIC SUCCESS IN KINESIOLOGY AND PHYSICAL EDUCATION (1). Evaluation and professional development of student interests, abilities, skills, and expectations related to KNPE undergraduate programs and related professional opportunities. May be repeated to a maximum of 2 semester hours. PRQ: Kinesiology and Physical Education major or minor or consent of department.

235. FUNDAMENTAL SPORT SKILLS (3). Skill development, performance, and analysis of sport skills utilizing Best Practices in teaching K-12 physical education. PRQ: Physical education major or minor.

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). An overview of athletic injuries and illnesses and the principles of injury prevention and care used by athletics trainers. PRQ: Admission into the athletic training major.

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 major 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. PRQ: Admission into the athletic training major.

300. FIELD EXPERIENCE IN KINESIOLOGY (1). Introduction to the field of kinesiology through supervised observations. CRQ: KNPE 301.

301. INTRODUCTION TO KINESIOLOGY AND SPORT PROFESSIONS (3). Introduction to concepts and competencies for careers in kinesiology.

302. ASSESSMENT IN PHYSICAL EDUCATION SCHOOL SETTINGS (3). Introduction and application of assessment approaches and techniques in school-based physical education programs. Emphasis on assessment within a standards-based model of instruction using performance-based assessment procedures. PRQ: KNPE 340, criminal background check, minimum 2.75 NIU cumulative GPA, and proof of TB clearance. CRQ: KNPE 303, KNPE 335.

303. CLINICAL EXPERIENCE IN PHYSICAL EDUCATION II (1). Clinical experience offering application of theory courses through direct interactions with students in K-12 physical education contexts in a partnership school district. PRQ: KNPE 340, criminal background check, minimum 2.75 NIU cumulative GPA, and proof of TB clearance.

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: NUTR 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: 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 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.

320. FOUNDATION OF ATHLETIC TRAINING (3). An exploration of the concepts and competencies of athletic training with an emphasis on current methods related to the care and prevention of athletic injuries.

322. CLINICAL PROFICIENCIES IN ATHLETIC TRAINING: UPPER-EXTREMITY ASSESSMENT (2). Laboratory experience in development of upper-extremity/body clinical assessment skills under direct supervision of an athletic training approved clinical instructor. CRQ: KNPE 325.

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 324.

326. THERAPEUTIC MODALITIES AND TREATMENT OF ATHLETIC INJURIES (3). Advanced principles of athletic training with emphasis on tissue healing processes, application of therapeutic modalities, and clinical decision making during rehabilitation of the physically active population. Lecture and laboratory. PRQ: KNPE 324. CRQ: KNPE 325.

331. CLINICAL EXPERIENCE IN ATHLETIC TRAINING I (3). Preprofessional clinical education experiences with diverse patient populations. Review and refinement of psychomotor athletic training skills and dispositions with the primary focus on prevention, emergency medical response, and therapeutic modalities. PRQ: KNPE 265 and KNPE 266.

332. CLINICAL EXPERIENCE IN ATHLETIC TRAINING II (3). Preprofessional clinical education experiences with diverse patient populations. Review and refinement of psychomotor athletic training skills and dispositions with the primary focus on assessment of upper-extremity injury and clinical decision making. PRQ: KNPE 331.

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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. PRQ: KNPE 235.

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. Off campus practicum in supervised experiences that include observations, small group teaching, and large group teaching in the public and/or parochial schools embedded in the course. PRQ: Physical education major or minor, successful completion of the criminal background check.

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, 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 athletic training major, 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: Consent of department.

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. PRQ: KNPE 335.

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.

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.

403. ADVANCED CLINICAL EXPERIENCE IN PHYSICAL EDUCATION (1). Application of theory courses through micro-teaching episodes with students in K-12 physical education contexts in a partnership school district. CRQ: KNPE 446.

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 302, KNPE 343, 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 EXERCISE AND REHABILITATION (2). Laboratory experience in development of clinical skills for therapeutic exercise and rehabilitation. PRQ: KNPE 323. CRQ: KNPE 491.

432. ORGANIZATION AND ADMINISTRATION CONCEPTS IN ATHLETIC TRAINING (2). Study of administration, organization, and legal issues including personnel, fiscal, and information management and how these apply to the athletic training profession. PRQ: KNPE 474.

434. CLINICAL EXPERIENCE IN ATHLETIC TRAINING III (3). Pre-professional clinical education with diverse patient populations. Review and refinement of psychomotor athletic training skills and dispositions with a primary focus on assessing lower-extremity injuries and clinical decision making with an emphasis on evidence based practice. PRQ: KNPE 332.

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.

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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. CRQ: KNPE 452, and a grade of C or better in the university's quantitative literacy foundational studies, 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: A minimum 2.75 GPA and 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. 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.

461. PHYSICAL ACTIVITY AND WELLNESS (3). Critical analysis of modern physical activity epidemiology allied with discussions of the importance of fitness and the relationship with the multidimensional components of wellness. PRQ: Junior standing or consent of department.

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 443. CRQ: Two semester hours 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. PRQ: KNPE 343, KNPE 344. CRQ: KNPE 466, 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. PRQ: KNPE 343, KNPE 344. CRQ: KNPE 466, KNPE 467.

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 343, KNPE 344, KNPE 467, KNPE 468, KNPE 490, and KNPE 365 or KNPE 366 and KNPE 367 or KNPE 368.

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.

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 343, KNPE 344, 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 343, KNPE 344, 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.

489. INTERNSHIP IN ATHLETIC TRAINING (1-6). Internship experience for students in B.S. degree program in athletic training. May be repeated to a maximum of 6 semester hours. S/U grading. PRQ: Minimum overall 2.50 GPA, grade of C or better in KNPE 314, KNPE 445, KNPE 452, and KNPE 463, First Aid and CPR certifications, and 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. CRQ: KNPE 343, KNPE 344, 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. PRQ: KNPE 302 and KNPE 303. CRQ: KNPE 343, KNPE 344.

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. CRQ: KNPE 463.

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 2.50 GPA, grade of C or better in KNPE 314, KNPE 445, KNPE 452, and KNPE 463, First Aid and CPR certifications, 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). Special topics in kinesiology and physical education to be announced in advance. May be repeated to a maximum of 9 semester hours when topic varies.

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 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)

152. PERSPECTIVES IN U.S. SPORT (3). Survey on the emergence of modern-day sports and the role they play in the United States. Focus on past and recent events in U.S. sports during the 19th, 20th, and 21st centuries.

201. INTRODUCTION TO SPORT MANAGEMENT (3). Overview of sport management professions. Primary focus on sport industry, including professional sports, amateur/intercollegiate sport, for-profit sport participation, nonprofit sport participation, sporting goods, and sport services.

341. ADMINISTRATION OF INTERCOLLEGIATE ATHLETICS (1). Introduction to contemporary and important issues present within intercollegiate athletics. Using current and former intercollegiate athletics personnel, administrators, faculty, and practitioners, the philosophies of athletics, the place of athletics in the educational curriculum, the relationship between men's and women's programs, athletic budgeting and finance, facilities and equipment, personnel administration, event operations management, fundraising, athletics and the law, and public relations are discussed and examined.

350. SPORT SALES AND SPONSORSHIP (3). Application and theories of sponsorship acquisition and sales methods to the sport industry. Examination of sport sponsorship and sales strategies and sponsorship evaluation methods in sport. CRQ: MKTG 350. PRQ: At least junior standing or consent of department.

353. SPORT LEADERSHIP (3). Theories of leadership and their application to and effect on a sport organization and its member constituents.

355. GLOBALIZATION OF SPORT (3). Analysis of the impact of globalization on the sport industry. Examination of policy analysis and governance in the global sport community. PRQ: Consent of department.

360. SPORT EVENT AND FACILITY MANAGEMENT (3). Practical application of the principles and concepts of facility operations and event management in the sporting industry specific to organizations in professional, collegiate, recreational, and Olympic sport. Planning for developing new sport/multipurpose facilities and sport-related events. Design, construction, maintenance, use, scheduling, and supervision of facilities. Event, crowd, and risk management at sport-related events and venues. In-depth investigation of the unique opportunities and challenges that are routinely faced by a manager in the context of events at sport, fitness, and recreation venues.

365. COMMUNICATION STRATEGIES IN SPORT (3). Application of communication theories to the sport industry. Examination of public and media relations with a special focus on message development, social media, image building and crisis management for sport organizations.

386. PROFESSIONAL DEVELOPMENT IN SPORT MANAGEMENT (1). Practical application and professional skill development in the area of sport management. Development to successfully prepare for internship and job placement in the sports industry. May be repeated to a maximum of 2 semester hours. PRQ: LESM 201 and at least junior standing; or consent of department.

438. SPORT MANAGEMENT STRATEGIES (3). Management functions related to sport organizations. Investigation of managerial roles and skills, and their effects on interpersonal, group, and organizational relationships. PRQ: At least junior standing or consent of department.

439. LEGAL AND ETHICAL ASPECTS OF SPORT (3). Overview of the United States legal system, different forms of legal liability and legal issues with application to the sport industry. Nature and role of ethics in sport. PRQ: At least junior standing or consent of department.

442. PROMOTION AND MARKETING OF SPORT PROGRAMS (3). Principles of organizing, marketing, and promoting events and activities associated with sports. PRQ: MKTG 295 and at least junior standing or consent of department.

444. FINANCE IN THE SPORT INDUSTRY (3). The conceptual and theoretical aspects of financial accounting management practices associated with the organization and operation of sport programs and organizations. The interaction of financial activities and management roles and functions. PRQ: FINA 320 and junior standing; or consent of department.

451. SPORT TICKET SALES (3). Practical application of sales strategies, techniques, operations, and practices specific to the sport ticketing industry. PRQ: MKTG 350, and at least junior standing; or consent of department.

452. ADVANCED EXPERIENCE IN SPORT MANAGEMENT (3). Enhancement of practical experiences in the sport management field. A series of guest lecturers, individual and group assignments, and practical experiences, will hone organizational, planning, managing, marketing, leadership, and selling skills. PRQ: Consent of department.

486. INTERNSHIP IN SPORT MANAGEMENT (1-15). Supervised full-time professional working experience for students in a sports management setting. May be repeated to a maximum of 15 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.

496. SPECIAL TOPICS IN SPORT MANAGEMENT (1-3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

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

Chad D. McEvoy, Ed.D., University of Northern Colorado, professor, chair

Clayton L. Camic, Ph.D., University of Nebraska-Lincoln, associate professor

Rodney L. Caughron, Ph.D., University of Iowa, associate professor

Peter J. Chomentowski, Ph.D., University of Pittsburgh, assistant professor

Todd A. Gilson, Ph.D., Michigan State University, associate professor

Shaine E. Henert, Ph.D., University of Minnesota, associate professor

Steven M. Howell, Ph.D., Purdue University, associate professor

Jennifer M. Jacobs, Ph.D., Northern Illinois University, assistant professor

So-Yeun Kim, Ph.D., Oregon State University, associate professor

Jenny Parker, Ed.D., University of Massachusetts, associate professor

William A. Pitney, Ed.D., Northern Illinois University, professor

James D. Ressler, Ph.D., Ohio State University, associate professor

Claire C. Zvosec, Ph.D., University of Kansas, assistant professor

Zachary A. Wahl-Alexander, Ph.D., University of Alabama, assistant professor

Paul M. Wright, Ph.D., University of Illinois at Chicago, Presidential Engagement Professor

Shuqi Zhang, Ph.D., Louisiana State University, assistant professor

Lauriece L. Zittel, Ph.D. Oregon State University, professor

Department of Leadership, Educational Psychology and Foundations (EPFE, EPS, LEBM, LEEA)

The Department of Leadership, Educational Psychology and Foundations offers courses in educational administration, educational psychology, foundations of education, and school business management. The department engages students in the critical study of educational theory and practice, developing reflective educators who base their teaching, research, and policy decisions on historical, philosophical, psychological, and socialcultural perspectives. In addition, the department facilitates the development of leaders who actively shape organizational cultures, are sensitive to moral and equity issues, and can manage and lead complex and changing entities. The courses are essential for helping students become reflective practitioners while participating in undergraduate programs leading to 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 and Policy 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 302 - Advocacy, Justice and Leadership in a Diverse Society (3)
- *^EPFE 321 - History of American Education (3)
- *^EPFE 355 - Sociology of Schooling (3)
- ^EPFE 400 - Foundations of Education (3)
- ^EPFE 410 - Philosophy of Education (3)
- EPFE 415 - Policy Analysis in Educational Contexts (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 201 - Education as an Agent for Change (3)
- ^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)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

Course List

Educational Administration (LEEA)

329. SPIRITUALLY-CENTERED LEADERSHIP (3). Opportunity to explore the intertwining of personal spirituality, epistemology, life work, and leadership. Designed to be inclusive of all religions, faiths, beliefs, and the lack thereof. Based in part on the experiences and suggestions of students in the class and will include practical ideas for using spirituality as a way to lead consciously. Particular emphasis will be placed on three aspects of spiritually-centered leadership: our personal beliefs and practices, spirituality with work colleagues, and spirituality with those whom our organization serves.

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). *Crosslisted as TLEE 282*. Pre-student teaching practicum. Observation, assessment, and analysis of child development and behavior. Observation and analysis of curriculum, instruction, assessment, and classroom management in culturally/economically diverse classrooms. Design, implementation, and evaluation of lesson plans. Requires a minimum of 16 clock hours working directly with elementary grad students and teachers to apply information and skills learned in college courses to classroom settings. S/U grading. PRQ: Consent of elementary education adviser. Concurrent enrollment in EPS 304 is required.

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, 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.

418. HUMAN MOTIVATION AND LEARNING (3). Students analyze motivation theories, and connect theory to practice and engagement in a variety of learning contexts, such as education, workplace, and sports. The course emphasizes applying theory to real-life contexts and situations. Students learn how to support and encourage human motivation and learning in their own lives.

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.

430. BECOMING ADULT IN POSTMODERN CONTEXTS (3). A cross-disciplinary approach to explore the meaning(s) of adulthood and the reasons for the delay in the transition to adulthood in contemporary society utilizing psychological, sociological, historical, and anthropological approaches. Focus on identity theories, postmodern critiques of identity, and contested definitions of adulthood. Reflection on identity development and growth toward adulthood is encouraged. PRQ: PSYC 102.

450. CLASSROOM MANAGEMENT (2). Applications of motivation and management principles and procedures to maintain a positive learning environment in classrooms.

452. CLASSROOM MANAGEMENT FOR ADOLESCENT STUDENTS (3). Applications of motivation and management principles and procedures to maintain a positive learning environment in classrooms, focusing particularly on the developmental needs of adolescent students. Topics include building relationships with students, establishing classroom structures and expectations, managing and resolving conflict appropriately, responding effectively to student misbehavior, and effectively implementing a variety of instructional modalities. Intended for middle and secondary licensure.

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.

300. ETHICS, THE LAW AND EDUCATIONAL POLICY (3). Introduction to the ethical implications and legal responsibilities of educational leaders working in a diverse society. Provides an opportunity to critically examine beliefs, values, and the influence of these on personal and professional leadership skills and policy development.

302. ADVOCACY, JUSTICE AND LEADERSHIP IN A DIVERSE SOCIETY (3). Introduction to the study and practice of effective leadership in a diverse society. Particular attention is given to issues of race, ethnicity, gender, sexual orientation, social class, disability and language. Introduction to theories and strategies that will prepare them to advocate and act in ways that shape and influence educational organizations and serve the interests of all members of society.

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.

415. POLICY ANALYSIS IN EDUCATIONAL CONTEXTS (3). Learn and employ critical policy analysis skills to understand, analyze and critique policy formation, implementation and evaluation. Examine the relationship between policy process and the role of leaders in diverse educational contexts. Explore how leadership skills, politics, social trends and conditions, educational philosophies, and policy research can all influence policy generation and outcomes. Policy analysis is treated as both a theoretical and practical endeavor.

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.

430. COMPARATIVE AND INTERNATIONAL EDUCATION (3). Examines sociocultural foundations of education from comparative perspectives. Field-based evidence from Western and non-Western societies used to examine the educational goals and practices across cultures and nations.

440. EDUCATION FOR SOCIAL JUSTICE (3). Examines the social and psychological conditions that give rise to increased levels of violence, aggression, and fear within individuals and societies. Explores how "education for social justice" as a conceptual framework can be best adopted and practiced by educators and citizens to clarify the moral and educational challenges posed by these destructive psychological and cultural patterns of behavior.

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

Carolyn Pluim, Ph.D., Georgia State University, associate professor, acting chair

Kerry Burch, Ph.D., University of Hawaii at Manoa, professor

Benjamin M. Creed, Ph.D., Michigan State University, assistant professor,

Daryl Dugas, Ph.D., University of Chicago, assistant professor

Lindsay Harris, Ph.D., University of Pittsburgh, assistant professor

Bradley Hawk, Ed.D., University of Illinois, Urbana-Champaign, assistant professor

Patrick Roberts, Ph.D., University of Illinois at Chicago, associate professor

Leslie A. Sassone, Ph.D., Purdue University, associate professor

Hidetada Shimizu, Ed.D., Harvard University, associate 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

Teresa Wasonga, Ed.D., University of Missouri, Presidential Engagement Professor

Department of Special and Early Education (SEEC, SESE, SEVI)

The Department of Special and Early Education (SEED) offers the B.S. degree with a major in early childhood education, the B.S.Ed. degree with a major in special education, and optional undergraduate course work in early childhood and special education. State of Illinois approved and CAEP accredited programs leading to professional educator licensure (PEL) with endorsement in early childhood education and special education (Learning Behavior Specialist I and Visual Impairments) are offered. In addition, SEED offers emphases that do not lead to PELs.

Advisement services are available to students 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.

Teacher candidates must complete a Criminal Background Check for some early clinical placements and for student teaching. See "Educator Licensure Requirements."

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.

Major in Early Childhood Education (B.S.)

The B.S. degree with a major in early childhood education is a program 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.

Early Childhood Education, Professional Educator Licensure

The early childhood education major prepares candidates to obtain professional educator licensure (PEL) with the early childhood education endorsement (eligible to teach children up to second grade) and the preschool special education approval (eligible to teach children with disabilities and special needs in pre-kindergarten) in the Illinois Public School System. Candidates who meet the PEL requirements will automatically be eligible to receive the Gateways to Opportunity Level 5 Early Childhood Education (ECE) credential. The early childhood education program is approved by the Illinois State Board of Education (ISBE), the National Association for the Education of Young Children, and Gateways to Opportunity.

Licensure and Endorsement Requirements

Candidates who major in early childhood education are required to meet Illinois licensure requirements including at least three semester hours of cultural diversity course work. To advance to

the first professional semester, candidates must have a) achieved an NIU GPA of 2.50 or better, b) a grade of C or better in HDFS 230, HIST 260 or HIST 261, LTIC 301, LTIC 400, LTIC 420, MATH 201, PSYC 102, SEEC 230, SEEC 401, SESE 240, and three of the following courses: GEOG 202 or GEOG 204, POLS 100, and one earth/space science courses, one life science course, and one physical science course, and c) completed the safety tutorial. To continue to enroll, candidates must maintain a minimum GPA of 2.50 in all professional education courses. The major GPA is calculated using course work completed in the Department of Special and Early Education.

As part of educator licensure, candidates are required to pass Illinois Licensure Testing System examinations as required by ISBE. Prior to student teaching, candidates must earn a passing score on the content area test (Early Childhood Education). During student teaching, candidates must earn a passing score on the Teacher Performance Assessment (edTPA). Failure to earn a passing score on the edTPA may result in the candidate receiving a degree without university recommendation for licensure.

Due to the comprehensive nature of the program and required course sequence, all candidates must plan their program of study with an early childhood education adviser. Some districts where candidates are placed for clinicals and student teaching may require a TB test. For information on additional requirements, candidates should carefully read the catalog section entitled "Educator Licensure Requirements."

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Professional Educator License with Early Childhood Endorsement and Preschool Special Education Approval

As part of educator licensure requirements, candidates in the early childhood education program must earn a grade of C or better in *GEOG 202 or GEOG 204; HDFS 230; *HIST 260 or *HIST 261; *LTIC 301; LTIC 400; LTIC 420; LTIC 435; LTIC 445; LTIC 447; LTLA 305; LTLA 361; LTRE 309; MATH 201; POLS 100; PSYC 102; SEEC 230; SEEC 300; SEEC 340; ^SEEC 343; SEEC 401; ^SEEC 403; SEEC 410; SEEC 425; SEEC 430; SESE 240; SESE 423; SESE 424; and SESE 426. In addition, candidates must earn a grade of C or better in one life science course, one earth/space science course, one physical science course, and two elective courses. Also, candidates must earn a grade of S in all early field experience and student teaching courses (SEEC 282, SEEC 382, SEEC 485A, SEEC 485B).

Requirements in Department (55)

SEEC 230 - Exploring the Early Childhood Education Major (1)
SEEC 282 - Educational Participation in Clinical Experiences: Early Childhood Education (3)
SEEC 300 - Observation and Assessment of Young Children (3)
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 Education (3)
*SEEC 401 - Play Development of the Young Child (3)
SEEC 403 - Primary Curriculum (3)
SEEC 410 - Trends and Issues in Early Childhood Education (3)

* Available for general education credit.

^ Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

SEEC 425 - Developing Social/Emotional Problem-Solving Competencies in Young Children (3)
 SEEC 430 - Preschool and Kindergarten Curriculum (3)
 SEEC 485A² - Student Teaching in Preschool-Kindergarten (6-12)
 SEEC 485B² - Student Teaching in Primary (6-12)
 SESE 240¹ - Introduction to Special Education (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 (54)

*COMD 220 - Introduction to Communicative Disorders (3)
 **EPFE 201¹ - Education as an Agent for Change (3)
 **HIST 260¹ - American History to 1865 (3)
 OR **HIST 261¹ - American History Since 1865 (3)
 *GEOG 202 - World Regional Geography (3)
 OR GEOG 204 - Geography of Economic Activities (3)
 HDFS 230¹ - Child Development (3)
 LTIC 301 - Teaching with a Multicultural Perspective (3)
 LTIC 400 - Introduction to Teaching English Language Learners (3)
 LTIC 420 - Methods and Materials for Teaching English Language Learners in the Content Areas (3)
 LTIC 445 - Applied Linguistics for Teachers of English Language Learners (3)
 LTLA 305 - Language Development (3)
 LTLA 361 - Literature for the Young Child (3)
 LTRE 309 - Emerging Literacy and Beginning Reading Instruction Through Age 8 (3)
 *MATH 201¹ - Foundations of Elementary School Mathematics (3)
 *POLS 100 - American Government and Politics (3)
 *PSYC 102¹ - Introduction to Psychology (3)
 Science courses (physical, life, earth/space) approved by adviser (9)

Total Hours for Professional Educator License with Early Childhood Education Endorsement and Preschool Special Education Approval: 109

Major in Special Education (B.S.Ed.)

In the B.S. Ed. in Special Education, candidates focus their studies in one emphasis: Learning Behavior Specialist I (LBS I), Visual Impairments, Vision Rehabilitation Therapy (VRT), or Special Populations. The LBS I cross-categorical emphasis prepares candidates to obtain an Illinois professional educator license (PEL) with entitlement as a Learning Behavior Specialist I (Pre-K - age 21). The emphasis in Visual Impairments prepares candidates to obtain a PEL with entitlement in the area of Teacher of Students Who Are Blind or Visually Impaired (Pre-K - age 21). The VRT emphasis prepares candidates to obtain national licensure as rehabilitation teachers from the Association for the Education and Rehabilitation of the Blind and Visually Impaired. Candidates in the VRT emphasis prepare to teach independent living skills to individuals with visual impairments. The VRT program does not lead to a PEL in the State of Illinois. The Special Populations emphasis prepares candidates to work with individuals with a range of disabilities across the lifespan in settings such as group homes, private agencies, and community organizations. The Special Populations emphasis does not lead to a PEL in the State of Illinois.

Entrance and Retention in the LBS I and Visual Impairments Program Emphases with Professional Educator Licensure

To advance to the first professional semester, candidates must have (a) achieved an NIU GPA of 2.50 or better, (b) received a grade of C or better in SESE 240 or an equivalent transfer course,

and (c) completed the safety tutorial prior to the first clinical experience. Advising staff verify completion of the safety tutorial, prerequisite course grades, and overall NIU GPA. All candidates who meet requirements are admitted to the Learning Behavior Specialist I or Visual Impairments teacher education program.

To remain a major in special education, candidates must (a) maintain a cumulative GPA of 2.50 or better, (b) receive a grade of C or better in professional courses and a grade of Satisfactory (S) in clinical courses, and (c) pass all state-mandated licensure tests the semester before enrolling in student teaching courses. Contact program advisors for information on mandated tests and deadlines for passing these before student teaching. For both the LBS I and the Visual Impairments emphases, candidates must pass all required courses in professional semesters with grades of C or better or, as appropriate, with a grade of S, before advancing to the next professional semester. Candidates must pass the first student teaching course with a grade of S before advancing to the second student teaching course. School districts providing early clinical and student teaching placements may have additional requirements such as TB testing that candidates must complete prior to working with students.

Candidates are expected to meet all university and College of Education standards for retention as well as 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 <http://www.niu.edu/assessment/clearinghouse/outcomes/index.shtml>.

Transfer Students

Individuals who have earned the Associate of Arts in Teaching (A.A.T.) in Special Education may apply to transfer into the professional educator licensure program in either the Learning Behavior Specialist I (LBS I) or the Visual Impairments emphasis. Transfer students must (a) have a minimum transfer GPA of 2.50, and (b) have grades of C or better in A.A.T. professional special education courses. The LBS I emphasis requires that the A.A.T. program include courses in Language Development and Introduction to Foundations of Reading. Candidates transferring to NIU with an A.A.T. in Special Education, who intend to pursue the LBS 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 educator license with LBS I endorsement.

License and Endorsement Requirements

Candidates who major in special education in the Learning Behavior Specialist I emphasis or the Visual Impairments emphasis are required to meet the Illinois licensure requirements including 29-41 semester hours of general education classes which must include at least three 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. Some districts where candidates are placed for clinicals or student teaching may require a TB test. Candidates who successfully complete the program requirements and pass the state mandated Teacher Performance Assessment (edTPA) during student teaching will have completed all required ISBE and CAEP standards for receiving university recommendation for licensure and special education endorsement in Visual Impairments or Learning Behavior Specialist I. Successful completion of the program without receipt of a passing score on the state mandated edTPA may result in the candidate receiving a degree without university recommendation for licensure.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

¹ Not required for students who have earned an A.A.T. in Early Childhood.

² Candidates complete a total of 12 credit hours selected from these two courses.

Endorsement for Non-Special Education Majors

Special Education course work meets all Illinois State Board of Education standards for endorsement in Special Education. This endorsement consists of 16-21 semester hours and is open to candidates currently seeking a Professional Educator License from a department other than SEED. Contact the academic adviser for details.

Emphasis 1. Learning Behavior Specialist I with PEL

Emphasis 1 prepares candidates for Illinois educator licensure with endorsement as a Learning Behavior Specialist I (Pre-K-age 21).

Candidates in the LBS I with PEL program emphasis must earn a grade of C or better in SESE 240, SESE 370, SESE 415, SESE 416, SESE 417, SESE 444, SESE 446, SESE 447, SESE 448, SESE 459, SESE 460, SESE 461, as well as EPFE 201, EPFE 321 or EPFE 410, EPS 405, ETR 434, ETT 402, LTCY 300, LTIC 420, MATH 201, and POLS 100 or POLS 150, and in courses meeting the Nature and Technology requirement. In addition, candidates must earn a grade of S in SESE 419 and all early field experience and student teaching courses (SESE 260, SESE 418, SESE 449, SESE 463, SESE 464, SESE 491, and SESE 492). Candidates who do not meet these requirements must retake the course(s).

Requirements in Department (63)

- SESE 230 - Exploring the Special Education Major (1)
- SESE 240¹ - Introduction to Special Education (3)
- SESE 260 - Observation of Individuals with Disabilities in Community and/or School Settings (1)
- **SESE 320 - Disability in Film (3)
- SESE 370 - Educational Interventions for Students with Diverse Abilities (3)
- ^SESE 415 - Instructional Methods for Elementary Students with Mild Disabilities: Reading, Language Arts (4)
- SESE 416 - Instructional Methods for Elementary Students with Mild Disabilities: Math and Science (3)
- SESE 417 - Positive Behavior Support and Classroom Management for Special Educators (3)
- SESE 418 - Early Field Experience in Special Education: Elementary, Mild Disabilities (2)
- SESE 419 - Introduction to Instructional Planning and Teacher Performance Assessment (2)
- ^SESE 444 - Instructional Methods and Strategies for Middle and Secondary Students with Mild Disabilities (3)
- SESE 446 - Methods for Supporting Social/Emotional Development of Students with Emotional/Behavior Disorders (3)
- SESE 447 - Consultation, Collaboration, and Communication Skills for Special Educators (3)
- SESE 448 - Planning for the Transition from School to Employment, Career, and Postsecondary Education for Students with Disabilities (3)
- SESE 449 - Early Field Experience in Special Education: Middle/Secondary (2)
- SESE 459 - Professional Practice in Special Education (3)
- SESE 460 - Instructional Methods for Individuals with Autism and Developmental Disabilities (3)
- SESE 461 - Assistive Technology for Individuals With Autism And Multiple Disabilities (3)
- SESE 463 - Early Field Experience in Special Education: Autism and Developmental Disabilities (2)
- SESE 464 - Special Education Capstone/Pre-student Teaching Seminar (1)
- SESE 491 - Student Teaching in Elementary Special Education: LBS I (6)
- SESE 492 - Student Teaching in Secondary Special Education: LBS I (6)

Requirements outside Department (34)

- **EPFE 201¹ - Education as an Agent for Change (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)
OR *HDFS 280 - Human Development, the Family, and Society (3),
OR PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)
- ETR 434 - Assessing Students with Special Needs (3)
- ETT 229 - Computers in Education (3) or pass the ETRA Skills Competency Examination (0)
- ETT 402 - Teaching and Learning with Technology (3)
- LTIC 420 - Methods and Materials for Teaching English Language Learners in the Content Areas (3)
- LTCY 300¹ - Foundations of Instruction in Reading, Writing, and the other Language Arts (4)
- *MATH 201¹ - Foundations of Elementary School Mathematics (3)
- *POLS 100¹ - American Government and Politics (3)
OR *POLS 150¹ - Democracy in America (3)
- *PSYC 102¹ - Introduction to Psychology (3)

Total Hours for Emphasis 1, Learning Behavior Specialist I: (97)

Emphasis 2. Visual Impairments with PEL

Emphasis 2 prepares candidates for Illinois educator licensure with endorsement in the area of Teacher of Students Who Are Blind and Visually Impaired (Pre-K to age 21).

Candidates in the Visual Impairments emphasis must earn a grade of C or better in SEVI 400, SEVI 410, SEVI 420, SEVI 421, SEVI 430, SEVI 440, SEVI 441, SEVI 450, SEVI 480, SEVI 484, SEVI 485, and SEVI 486. In addition, candidates must earn a grade of C or better in EPFE 201, EPFE 321 or EPFE 410, EPS 405, ETR 434, ETT 402, LTCY 300, LTIC 301 or LTIC 420, MATH 201, SESE 240, SESE 415, SESE 416, SESE 417, SESE 444, and SESE 447, and in courses meeting the Nature and Technology requirement. In addition, candidates must earn a grade of S in SESE 418 and SESE 449. Candidates who do not meet these requirements must retake the course(s).

Requirements in Department (65)

- SESE 240 - Introduction to Special Education (3)
- ^SESE 415 - Instructional Methods for Elementary Students with Mild Disabilities: Reading, language Arts (4)
- SESE 416 - Instructional Methods for Elementary Students with Mild Disabilities: Math and Science (3)
- SESE 417 - Positive Behavior Support and Classroom Management for Special Educators (3)
- SESE 418 - Early Field Experience in Special Education: Elementary, Mild Disabilities (2)
- ^SESE 444 - Instructional Methods and Strategies for Middle and Secondary Students with Mild Disabilities (3)
- SESE 447 - Consultation, Collaboration, and Communication Skills for Special Educators (3)
- SESE 449 - Early Field Experience in Special Education: Middle/Secondary (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 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: Visual Impairments (3)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

¹ Not required for students who have earned an A.A.T. in Special Education.

SEVI 484 - Student Teaching in Elementary Special Education:
Visual Impairments (6)
SEVI 485 - Student Teaching in Secondary Special Education:
Visual Impairments (6)
SEVI 486 - Topical Seminar in Teaching Students with Visual
Impairments (3)

Requirements outside Department (28-31)

**EPFE 201 - Education as an Agent for Change (3)
*^EPFE 321 - History of American Education (3)
OR ^EPFE 410 - Philosophy of Education (3)
EPS 405 - Issues in Human Development in the Elementary
Through High School Years (3)
ETT 229 - Computers in Education (3) or pass the ETRA Skills
Competency Examination (0)
ETT 402 - Teaching and Learning with Technology (3)
ETR 434 - Assessing Students with Special Needs (3)
LTIC 420 - Methods and Materials for Teaching English Language
Learners in the Content Areas (3),
OR *LTIC 301 - Teaching with a Multicultural Perspective (3)
LTCY 300 - Foundations of Instruction in Reading, Writing, and The
Other Language Arts (4)
*MATH 201 - Foundations of Elementary School Mathematics (3)
*PSYC 102 - Introduction to Psychology (3)

Total Hours for Emphasis 2, Visual Impairments: 94-96

Minor in Special Education Foundations (18)

The minor in special education foundations is designed for NIU students *not* pursuing professional educator licensure. Course work focuses on legal and societal perspectives of disabilities, and ways in which individuals with disabilities participate in employment, leisure, and daily living activities. Emphasis is on the impact of disability in non-educational settings. Nine or more semester hours in the minor must be completed at NIU. Students pursuing this minor must formally file the Minor Request form with the undergraduate adviser in the Department of Special and Early Education.

Requirements (18)

EPFE 302 - Advocacy, Justice, and Leadership in a Diverse Society (3)
**REHB 200 - Disability in Society (3)
SESE 240 - Introduction to Special Education (3)
SESE 260 - Observation of Individuals with Disabilities in
Community and/or School Settings (1)
**SESE 320 - Disability in Film (3)
SESE 490 - Workshop in Special Education (2)
And at least one of the following six courses (3)
FLSL 101 - Beginning American Sign Language (3)
*REHB 300 - Psychiatric Disability in Society (3)
REHB 327 - Introduction to Rehabilitation Services (3)
REHB 482 - Employment Services in Vocational Rehabilitation (3)
^REHB 492 - Medical Aspects of Disability in Rehabilitation (3)
**SEVI 205 - The Blindness Experience (3)

Certificates of Undergraduate Study

Inclusive Teaching Practices (15)

This certificate is designed to prepare teacher candidates with knowledge and skills related to children with disabilities included in school settings. This certificate is appropriate for NIU students pursuing educator licensure in an area other than special education. Course work in this program focuses on the impact of disabilities on children in school settings and ways to facilitate their learning. All course requirements for this certificate must be completed at NIU within three calendar years. Students pursuing this certificate must file a formal application with the undergraduate adviser in the Department of Special and Early Education and must complete all certificate requirements before

the certificate is listed on the transcript. This certificate does not fulfill requirements for special education endorsement. Teacher candidates who want to earn the Special Education endorsement should contact their adviser for further information.

Requirements (15)

SESE 240 - Introduction to Special Education (3)
SESE 260 - Observation of Individuals with Disabilities in
Community and/or School Settings (1)
SESE 417 - Positive Behavior Support and Classroom Management
for Special Educators (3)
SESE 456 - Methods for Collaboration and Inclusion for Elementary
Education Teachers (3),
OR SESE 457 - Methods for Including Middle and Secondary
Students with Exceptionalities in the General Education
Classroom (3)
SESE 490 - Workshop in Special Education (2)
**SEVI 205 - The Blindness Experience (3),
OR FLSL 101 - Beginning American Sign Language (3),
OR ARTE 479 - Art for Special Needs Populations (3)

Young Children with Disabilities Studies (15)

This certificate is designed to prepare students with a set of courses focused on assessment and instruction of young children with disabilities. Students completing this certificate will acquire the skills and techniques for assessing the communication, social, and cognitive skills of young children and providing appropriate supports to children and families. The certificate of undergraduate study in young children with disabilities studies is open to all students admitted to Northern Illinois University. All course requirements for this certificate must be completed at NIU within three calendar years. Students who want to pursue this certificate must receive approval and advisement from advisers in the Department of Special and Early Education. All course requirements for this certificate must be completed at NIU. Teacher candidates who want to earn the Early Childhood Special Education approval should contact their adviser for further information.

Requirements (15)

SESE 240 - Introduction to Special Education (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)
LTLA 305 - Language Development (3),

Course List

Early Childhood Education (SEEC)

230. EXPLORING THE EARLY CHILDHOOD EDUCATION MAJOR (1). Exploration of the early childhood education major at NIU with an emphasis on learning about faculty, resources, student organizations, advising, requirements, and the program of studies.

282. EDUCATIONAL PARTICIPATION IN CLINICAL EXPERIENCES: EARLY CHILDHOOD EDUCATION (3). Pre-student teaching clinical in early childhood programs for children 3 years through 5 years of age. May be repeated to a maximum of 6 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.

* Available for general education credit.

^ Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

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). Ways of supporting 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, the language arts curriculum, and the social studies curriculum for the primary grades such as the implementation of democratic values and processes, citizenship rights and responsibilities, and functions of government.

343. TEACHING SCIENCE AND MATHEMATICS TO CHILDREN AGES 5-8 (3). Design of science and mathematics curriculum with emphasis on physical and life science and mathematics content for young children, methods and materials, problems and issues, and research findings.

382. PRACTICUM IN EARLY CHILDHOOD EDUCATION (3). Participation and observation in early childhood classrooms where children ages 5 through 8 are enrolled. 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.

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.

412. TRENDS AND ISSUES IN PROFESSIONAL SERVICES FOR YOUNG CHILDREN (3). Seminar to accompany SEEC 489. Provides opportunities for Professional Services Providers to develop competencies to meet the needs of young children, ages birth to age 8, and their families through education-based services. Course assignments to be arranged by department; S/U grading will apply. PRQ: SEEC 382. CRQ: SEEC 489.

425. DEVELOPING SOCIAL/EMOTIONAL PROBLEM-SOLVING COMPETENCIES IN YOUNG CHILDREN (3). Methods for developing prosocial, emotional and social-problem competencies in young children. Includes positive self-concept, emotional literacy, friendship skills, and social-problem solving across the early childhood age continuum. Creation and provision of (a) nurturing and responsive relationships and high quality supportive environments; (b) systemic approaches to teaching targeted skills to achieve preventive and remedial effects, (c) survey of functional behavior assessment approaches leading to team-based development, implementation and evaluation of effective, intensive support plans; and (d) evidence-based systems and policies to support classroom teams in these efforts.

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 (6-12). Student teaching for one-half semester or one entire semester in early childhood programs for children 3 years through 5 years of age. Assignments to be arranged with the department. S/U grading. See "Educator Licensure Requirements." PRQ: SEEC 382, and a grade of C or better in all pre-professional courses.

485B. STUDENT TEACHING IN PRIMARY (6-12). Student teaching for one-half semester or one entire semester in classrooms where children age 5 through 8 are enrolled. Assignments to be arranged with the department. S/U grading. See "Educator Licensure Requirements." PRQ: SEEC 382, and a grade of C or better in all pre-professional courses.

489. INTERNSHIP IN EARLY CHILDHOOD EDUCATIONAL SERVICES (12). Field experience in one or more agencies or organizations that provide education-based services to families and young children, ages birth through 8. Course assignments to be arranged by department; S/U grading will apply. PRQ: SEEC 382. CRQ: SEEC 412.

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)

210. INTERNATIONAL PERSPECTIVES ON EDUCATING INDIVIDUALS WITH DISABILITIES (3). Introduction to international perspectives and practices related to individuals with disabilities. Exploration of historical, social, cultural, and political perspectives that impact the education of individuals with disabilities.

230. EXPLORING THE SPECIAL EDUCATION MAJOR (1). Exploration of the special education major at NIU with an emphasis on learning about faculty, resources, student organizations, advising, requirements, and the program of studies.

240. INTRODUCTION TO SPECIAL EDUCATION (3). Introduction to special education and working with individuals with disabilities in educational and community settings; emphasis on characteristics, laws and legal issues, history and philosophy of the field of special education.

250. INTRODUCTION TO PROFESSIONAL LEADERSHIP IN SPECIAL EDUCATION (1). Development of leadership, communication, and collaboration skills necessary for career success as a special educator. Design and implement professional development activities, explore leadership opportunities, and participate in professional learning communities.

260. OBSERVATION OF INDIVIDUALS WITH DISABILITIES IN COMMUNITY AND/OR SCHOOL SETTINGS (1). Accumulation of 30 hours of experience observing individuals with disabilities in community and/or school settings. Reflection on inclusive practices and societal views of disability. 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

320. DISABILITY IN FILM (3). Examination of how individuals with disabilities are represented in motion pictures and television. Special emphasis is placed on how film depicts individuals with disabilities and one's personal reflection of attitudes, beliefs, and understandings of disability.

370. EDUCATIONAL INTERVENTIONS FOR STUDENTS WITH DIVERSE ABILITIES (3). Examination of appropriate educational interventions and programs for students with diverse cultural, linguistic, cognitive, and adaptive abilities that impact learning. Overview of current theories, research, and practices in the field of special education. Emphasis on identification of learner strengths and needs, and pre-referral systems of support for learners. PRQ: SESE 240.

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 (IPTS) for classroom management and socio-emotional learning. PRQ: Junior standing or consent of department.

415. INSTRUCTIONAL METHODS FOR ELEMENTARY STUDENTS WITH MILD DISABILITIES: READING, LANGUAGE ARTS (4). Design, implementation, and adaptation of reading, writing, and spelling curricula for elementary students with mild disabilities. Emphasis on explicit systematic instructional approaches and data-driven decision making related to literacy for students with and at risk for disabilities in the elementary grades. PRQ: SESE 370 and LTCY 300; or consent of department.

416. INSTRUCTIONAL METHODS FOR ELEMENTARY STUDENTS WITH MILD DISABILITIES: MATH AND SCIENCE (3). Design, implementation, and adaptation of math and science curricula for elementary students with mild disabilities. Emphasis on explicit systematic instructional approaches and data-driven decision making related to math and science for students with and at risk for disabilities in the elementary grades. PRQ: SESE 370 and LTCY 300; or consent of department.

417. POSITIVE BEHAVIOR SUPPORT AND CLASSROOM MANAGEMENT FOR SPECIAL EDUCATORS (3). Application of evidence-based practices in positive behavior support and 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 behavior assessments, and implement group and individual behavior change programs in classroom settings. PRQ: SESE 370 and LTCY 300; or consent of department.

418. EARLY FIELD EXPERIENCE IN SPECIAL EDUCATION: ELEMENTARY, MILD DISABILITIES (2). Supervised field experience in special education. Emphasis on instruction of students with mild disabilities in the elementary grades, urban schools, culturally responsive instruction, and response to intervention programs. S/U grading. PRQ: SESE 370 and LTCY 300; admission to teacher education program, criminal background check, and other district, department, and university requirements.

419. INTRODUCTION TO INSTRUCTIONAL PLANNING AND TEACHER PERFORMANCE ASSESSMENT (2). Introduction to instructional planning, teacher performance assessment (edTPA). Development and delivery of lesson plans created for diverse learners with an emphasis on evaluation and reflection of instructional practices and student learning. Activities include an overview of design, implementation, and evaluation of lesson plans using digital technology. S/U grading. PRQ: SESE 240 and SESE 370; or consent of department.

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 and SESE 423.

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.

444. INSTRUCTIONAL METHODS AND STRATEGIES FOR MIDDLE AND SECONDARY STUDENTS WITH MILD DISABILITIES (3). Study and practice of evidence-based curricula, methods, and strategies for teaching middle and secondary students with mild disabilities. Emphasis on teaching study skills and learning strategies which promote independent learning. PRQ: SESE 415, SESE 416, SESE 417, SESE 418; or consent of department.

446. METHODS FOR SUPPORTING THE SOCIAL/EMOTIONAL DEVELOPMENT OF STUDENTS WITH EMOTIONAL/BEHAVIOR DISORDERS (3). Organization of the school and classroom environment to facilitate management of academic and social behavior of K-12 students with emotional and/or behavior disorders. Provides foundational theory and knowledge to select specific techniques to promote social competency in students with emotional/ behavior disorders. Discusses research related to use of these techniques and interventions. Discusses class wide and individual methods and strategies for teaching appropriate social behavior and social skills. PRQ: SESE 415, SESE 416, SESE 417, and SESE 418; or consent of department.

447. CONSULTATION, COLLABORATION, AND COMMUNICATION SKILLS FOR SPECIAL EDUCATORS (3). Strategies for effectively consulting, collaborating, and communicating with general educators, administrators, paraprofessionals, families, teams, and community personnel. Emphasis on effective interpersonal, conflict resolution, and problem solving skills; ways to facilitate meetings; co-teaching; and methods for supporting inclusionary placements for students with disabilities. PRQ: SESE 415, SESE 416, SESE 417, and SESE 418; or consent of department.

448. PLANNING FOR THE TRANSITION FROM SCHOOL TO EMPLOYMENT, CAREER AND POSTSECONDARY EDUCATION FOR STUDENTS WITH DISABILITIES (3). Strategies for effectively planning the transition from school to employment, career, postsecondary education and community for students with disabilities in secondary school settings. Emphasis on student-centered planning, career and transition assessment involving students, families, school and community supports. Includes field-based assignments. PRQ: SESE 415, SESE 416, SESE 417, and SESE 418; or consent of department.

449. EARLY FIELD EXPERIENCE IN SPECIAL EDUCATION: MIDDLE/SECONDARY (2). Pre-student teaching clinical experience. Observation and instruction in diverse special and/or general middle or secondary education settings where students with mild disabilities receive special education services. Activities include observing various instructional models; co-teaching; writing, implementing, and reflecting upon instructional lessons; completing career exploration activities, administering transition assessments, and writing transition plans. S/U grading. PRQ: SESE 415, SESE 416, SESE 417 SESE 418, criminal background check, and other district, department, and university requirements.

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.

456. **METHODS FOR COLLABORATION AND INCLUSION FOR ELEMENTARY EDUCATION TEACHERS (3).** Strategies for collaborating with parents, family members, and school and community personnel to support students with disabilities. Emphasis on recommended practices related to family-educator conferences, team meetings, consultation, team models and processes, conflict resolution and problem-solving, culturally and linguistically diverse families, accommodations and modifications for students, universal design, assistive technology, and evidence-based methods for inclusive practices. Does not count toward degree program in special education. 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 make 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. CRQ: Junior standing and PHHE 220 or ARTE 344 or ILAS 201 or MUED 275.

459. **PROFESSIONAL PRACTICE IN SPECIAL EDUCATION (3).** Development and analysis of the roles and responsibilities of special educators. Emphasis on IEPs, collaboration, communication, and professional growth. PRQ: SESE 444, SESE 446, SESE 447, SESE 448, and SESE 449; or consent of the department.

460. **INSTRUCTIONAL METHODS FOR INDIVIDUALS WITH AUTISM AND DEVELOPMENTAL DISABILITIES (3).** Instructional strategies and interventions for teaching functional skills to individuals with autism and severe developmental disabilities in school, home, community, and vocational settings using the principles of Applied Behavior Analysis and evidence-based practices. Designing individualized instructional programs; quantitative data collection and analysis; and implementing data-based problem-solving and decision making processes. PRQ: SESE 444, SESE 446, SESE 447, SESE 448, and SESE 449; or consent of department.

461. **ASSISTIVE TECHNOLOGY FOR INDIVIDUALS WITH AUTISM AND MULTIPLE DISABILITIES (3).** Evaluating the abilities of individuals with autism and multiple disabilities in relation to environmental demands and settings and determining adaptations, adaptive equipment, and/or assistive devices that can be used to ensure active participation. Teacher candidates demonstrate proficiency in programming augmentative communication devices, using assistive software, mobile devices, and other low and high tech assistive technology devices. PRQ: SESE 444, SESE 446, SESE 447, SESE 448, and SESE 449; or consent of department.

462. **SELF-DETERMINATION AND TRANSITION PLANNING USING TECHNOLOGY (3).** Strategies for using technology to promote self-determination, self-advocacy, and transition planning among youth with disabilities. Emphasis on preference assessment, goal-setting, and action-planning for transition. Field-based activities are required. PRQ: SESE 444 and SESE 446 and SESE 447 and SESE 448 and SESE 449; or consent of department. CRQ: SESE 460 and SESE 461.

463. **EARLY FIELD EXPERIENCE IN SPECIAL EDUCATION: AUTISM AND DEVELOPMENTAL DISABILITIES (2).** Pre-student teaching clinical experience. Observation and instructional practice in diverse special and/or general education settings where students with autism or low-incidence disabilities receive special education services. Activities include design, implementation, and evaluation of lesson plans and instructional programs. S/U grading. PRQ: SESE 444, SESE 446, SESE 447, SESE 448, and SESE 449, and other district, department, and university requirements.

464. **SPECIAL EDUCATION CAPSTONE/PRE-STUDENT TEACHING SEMINAR (1).** Preparation for student teaching, the Teacher Performance Assessment, and applying for special education positions. S/U grading. PRQ: SESE 444, SESE 446, SESE 447, SESE 448, and SESE 449 or consent of department.

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.

480. **PRACTICAL EDUCATION-BASED EXPERIENCE IN SPECIAL EDUCATION (1).** Pre-student teaching field experience. Instructional practice in diverse special and/or general education settings where students with high-incidence or low-incidence disabilities receive special education services. Activities include design, implementation, and/or evaluation of lesson plans, instructional programs, transition plans, and/or behavior support plans. S/U grading. Can be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

489. **INTERNSHIP IN COMMUNITY EDUCATION (6-12).** 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. PRQ: Consent of department.

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.

491. **STUDENT TEACHING IN ELEMENTARY SPECIAL EDUCATION: LBS I (6-12).** Supervised student teaching of students with exceptionalities and disabilities in diverse cultural and educational elementary settings for one-half semester or one entire semester. Candidates must satisfy the regulations governing student teaching. S/U grading. PRQ: Completion of all professional education and related course work with a grade of C or better. Consent of department.

492. **STUDENT TEACHING IN SECONDARY SPECIAL EDUCATION: LBS I (6-12).** Supervised student teaching of students with exceptionalities and disabilities in diverse cultural and educational secondary settings for one-half semester or one entire semester. Candidates must satisfy the regulations governing student teaching. S/U grading. PRQ: Completion of professional education and related course work with C or better. Consent of department.

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.

Visual Impairments (SEVI)

205. **THE BLINDNESS EXPERIENCE (3)** Exploration of diverse views of blindness, underlying societal factors that influence these views, and adaptations commonly used by people who are blind or have low vision to maximize their independence, health, and wellness in daily life.

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. Introduction to lesson planning, instructional delivery, and the edTPA. 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, pre-cane skills, and a full range of mobility options. Exploration of historical background and current issues in orientation and mobility. Includes blindfold and simulator experience. 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.

445. HOME MANAGEMENT FOR PERSONS WITH VISUAL IMPAIRMENTS AND MULTIPLE DISABILITIES (3). Study of various adaptive techniques involved in teaching home management and related life skills to persons who are visually impaired and/or multiply disabled. Emphasis on individuals who are transition-aged, vocational-aged, and seniors. PRQ: Consent of department.

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 SEVI 550. PRQ: SEVI 420.

451. ASSISTIVE TECHNOLOGY FOR PERSONS WITH VISUAL IMPAIRMENTS: ADVANCED TOPICS (3). Advanced features of recently developed technologies used by persons who are visually impaired. Emphasis on advanced instructional applications. PRQ: SEVI 450 or consent of department.

460. REHABILITATION OF ADULTS WITH VISUAL IMPAIRMENTS (3). Community resources, methods and materials to assist adults with visual impairments through rehabilitation. Includes history, rehabilitation models, and legislation. Emphasis on team management, evaluation, concomitant disabilities, and vocational planning. PRQ: Consent of department.

480. FIELD EXPERIENCE IN SPECIAL EDUCATION: VISUAL IMPAIRMENTS (3). Supervised observation and teacher-directed experiences in culturally and educationally diverse settings with children who are visually impaired. PRQ: Consent of department.

481. PRACTICUM IN REHABILITATION TEACHING OF PERSONS WITH VISUAL IMPAIRMENTS (3). Supervised field experiences in working with persons with visual impairments in daily living activities. PRQ: Consent of department.

484. STUDENT TEACHING IN ELEMENTARY SPECIAL EDUCATION: VISUAL IMPAIRMENTS (6). Supervised observation and teacher-directed experiences in cultural and educational settings with students who are visually impaired. 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: VISUAL IMPAIRMENTS (6). Supervised observation and teacher-directed experiences in cultural and educational settings with students who are visually impaired. Students must satisfy the regulations governing student teaching. PRQ: Completion of professional education and related course work, or consent of department.

486. TOPICAL SEMINAR IN TEACHING STUDENTS WITH VISUAL IMPAIRMENTS (3). Trends and issues in the education of individuals with visual impairments across the full continuum of educational environments. PRQ: SEVI 440 and SEVI 441 and SEVI 480; or consent of department.

489. INTERNSHIP IN REHABILITATION TEACHING OF PERSONS WITH VISUAL IMPAIRMENTS (1-12). Supervised instruction including observation and participation in residential school, day school, and/or agency programs for adults with visual impairments. PRQ: Consent of department.

Special and Early Education Faculty

Greg Conderman, Ed.D., University of Northern Colorado, professor, chair
 Natalie Andzik, Ph.D., Ohio State University, assistant professor
 Jeffrey Chan, Ph.D., University of Texas at Austin, associate professor
 Stephanie DeSpain, Ed.D., Illinois State University, assistant 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
 Gaylan G. Kapperman, Ed.D., University of Northern Colorado, professor emeritus
 Stacy Kelly, Ed.D., Northern Illinois University, associate professor
 Lisa Liberty, Ph.D., University of Washington, assistant professor
 Robin Miller Young, Ed.D., Northern Illinois University, assistant professor
 William Penrod, Ed.D., University of Louisville, associate professor
 Erika Pinter, Ph.D., University of Washington, associate professor
 Toni VanLaarhoven, Ed.D., Northern Illinois University, Presidential Teaching Professor
 Natalie Young, Ed.D., Northern Illinois University, assistant professor

College of Engineering and Engineering Technology

Donald R. Peterson, Ph.D., FAIMBE, dean
Mansour Tahernezahdi, Ph.D., P.E., senior associate dean,
research and graduate programs
Abul K.M. Azad, Ph.D., acting associate dean,
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.

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).

Accelerated B.S. /J.D. Program in Engineering or Engineering Technology and the College of Law

Admission

The six-year integrated sequence leads to both the B.S. in engineering and engineering technology and J.D. degrees and is open to all undergraduate students majoring in engineering or engineering technology who have senior standing and have finished at least 100 credit hours of undergraduate course work with a minimum GPA of 3.25. In addition to applying for the combined degree program through the College of Engineering and Engineering Technology's Office of the Senior Associate Dean, students must also make a separate application to the College of Law's Office of Admissions for admission to the 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 receive a score above the 50th percentile of the previous year's matriculating law class.

Curriculum

General education and engineering or engineering technology requirements fill the schedule during the first three years of the program. Students admitted to the program will need to take a minimum of 6 semester hours of engineering courses in the summer following their third year and up to 6 additional semester hours of engineering courses in the summer following their fourth year. Beginning with the first semester of their fourth year, students will be completing their B.S. degree and will begin taking classes at the College of Law. The final two years of the program will be comprised only of College of Law courses. Students admitted to the integrated Engineering, Technology and Law program will receive up to 9 semester hours towards their B.S. degree technical elective requirements as a result of successful completion of their first-year law courses. In addition, up to 6 semester hours of 400-level engineering courses will be counted towards the Law degree.

Additional Requirements

Once students have been accepted into the integrated program and have matriculated in the College of Law at the beginning of Year 4, they must have their schedules approved by the College of Law associate dean for student services each semester until they have completed all courses ordinarily required of first-year law students. Finally, to be eligible to continue in the program, students must receive their B.S. degree no later than December of Year 5 (the second year of law school).

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 450. PATENT AND COPYRIGHT LAW FOR ENGINEERS AND SCIENTISTS (3). Fundamentals of intellectual property rights as applied to engineering and science. Discussion of the basis of those rights in patent, copyright, trade secret, and trademark laws. Focus on patent data base searching, patent claim analysis and review, and patent application drafting. Exposure to the knowledge base required for a career as a patent agent or patent lawyer. Use of case studies to manage intellectual property strategically and to develop the analytical skills necessary for engineers and scientists to protect inventions. Review of employment contracts with a focus on ownership, confidentiality, non-competing provisions, and the associated consequences for engineers and scientists.

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.

UEET 301. TRANSITION TO THE PROFESSION OF ENGINEERING (1). Exposure to the daily activities of practicing engineers including potential site tours; development of interdisciplinary communication skills; in-depth analysis of case studies in engineering ethics; collaborative project to reinforce technical concepts and teamwork skills. PRQ: Junior or senior standing with a declared major in engineering or consent of department.

UEET 481X. IDEA, INNOVATION, AND IMPACT ACCELERATOR LAB (3). *Crosslisted as MGMT 481*. Application of the entrepreneurial process with a focus on opportunity identification, ideation, technological innovation, design for social impact, and environmental and social sustainability. Develops knowledge and capabilities about creativity in business, social impact and innovation, design and prototyping, engineering, business plan development, and new venture launch. PRQ: Consent of department.

Department of Electrical Engineering (ELE)

The Department of Electrical Engineering offers two undergraduate degrees: a B.S. in electrical engineering and a B.S. in biomedical engineering. The B.S. in electrical engineering offers five areas: microelectronics, power/controls, signal processing and communications, electromagnetics, and computer engineering. The B.S. in electrical engineering 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. The B.S. in biomedical engineering offers two tracks: biomechanics and biomaterials in Track 1, and biomedical instrumentation, sensors and signal processing in Track 2. Both tracks in biomedical engineering will equip students with the basic competence and job skills needed to design, develop, and operate biomedical systems and devices.

As a profession, both electrical and biomedical engineering demands the individual to work with others in supporting disciplines to achieve common goals. Design is central to both professions and is integrated throughout the curricula for both programs. The design experience in each program 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 both the electrical engineering and the biomedical engineering curricula.

Accelerated B.S./M.S. Sequence

This accelerated sequence leads to both the B.S. and M.S. degrees in electrical engineering and is open to all undergraduate electrical engineering majors who finished at least 90 semester hours of undergraduate course work with a minimum GPA of 3.00. A minimum GPA of 3.00 must be maintained during the course of study. Failure to meet the requirements of the accelerated sequence may lead to a B.S. degree only, but only after all the requirements for that degree have been met.

With this program, M.S. courses can be taken three semesters prior to earning the B.S. degree and have up to 18 semester hours count towards both the M.S. and B.S. degrees. A GRE is not required. Students must meet Graduate School application deadlines. Interested students should talk with an adviser as early as possible and are encouraged to apply during the spring semester of their junior year.

Students wishing to take part in this program should be aware of all the regulations and restrictions of accelerated baccalaureate/master's degree programs as outlined in the NIU Graduate School Catalog under the heading of Early Admission of NIU Undergraduates; and Admission to Accelerated Baccalaureate/Master's Degree Programs.

All students enrolled in this sequence must have their schedule approved by their faculty adviser each semester. Any deviation from an approved course schedule may delay graduation.

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.

Biomedical Engineering Program Educational Objectives

A B.S. in Biomedical Engineering will equip students with cross-disciplinary knowledge and training in life sciences and medicine, training them to apply core engineering principles to analyzing and solving complex problems in the biomedical related fields. Graduates of this program are expected to have a solid background in mathematics, sciences, and engineering fundamentals as well as core biological sciences. Successful completion of this program should enable the graduates with the ability to seamlessly transition between fields in identifying and solving problems pertinent to life sciences and medicine. The program curriculum will involve engaged teaching and learning as well as design experience through establishing a synergy between classroom and hands-on laboratory activities. This curriculum has an emphasis on creating, transmitting, expanding, and applying knowledge in the practice of biomedical engineering in a professional and ethical way, while preparing our graduates to succeed in the industry as well as preparing them for graduate education.

Program Learning Outcomes

The Electrical Engineering and Biomedical Engineering programs are designed to provide our graduates with:

- 1) An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- 2) An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- 3) An ability to communicate effectively with a range of audiences.
- 4) An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

- 5) An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- 6) An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- 7) An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Department Requirements

All electrical engineering students and biomedical 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 Biomedical Engineering (B.S.)

Course Requirements

Students entering the BME program complete the required course work within the department and outside of the department and complete three required courses and three electives from the list of preapproved courses, based on the track they choose.

Tracks in Biomedical Engineering program: There are two tracks in the BME program:

- Biomechanics and Biomaterials
- Biomedical Instrumentation, Sensors and Signal Processing

Requirements in Department (29)

BME 201 - Introduction to Biomedical Engineering (3)
 BME 320 - Introduction to Biomedical Measurements (4)
 BME 330 - Biomechanics (3)
 BME 336 - Biomaterials (3)
 BME 395 - Biomedical Engineering Junior Design (1)
 ^BME 495 - Biomedical Engineering Senior Design I (3)
 ^BME 496 - Biomedical Engineering Senior Design II (3)
 ELE 210 - Engineering Circuit Analysis (3)
 ELE 210U - Engineering Circuit Laboratory Project (1)
 ELE 315 - Signals and Systems (3)

Requirements outside Department (51-52)

BIOS 208 - Fundamentals of Cellular Biology I (3)
 BIOS 210 - Fundamentals of Cellular 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 - Introduction to Organic Chemistry (3)
 CHEM 231 - Introduction to Organic Chemistry Laboratory (1)
 CSCI 240 - Computer Programming in C++ (4)
 ISYE 335 - Probability and Statistics for Engineers (3),
 OR STAT 300 - 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)
 MEE 209 - Engineering Mechanics: Statics and Dynamics (4)
 PHYS 253 - Fundamentals of Physics I: Mechanics (4)
 PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
 UEET 101 - Introduction to Engineering (1)

The list of preapproved elective courses (i.e., selective electives) beyond the required core BME courses for each of the BME tracks are as follows:

Track 1: Biomechanics and Biomaterials (18-20)

Required Courses (9)

MEE 340 - Fluid Mechanics (3)
 BME 435 - Biotransport (3)
 BME 436 - Advanced Biomaterials and Manufacturing (3)

Elective Courses (9-11)

Choose at least 9 credit hours from the following:
 BME 420 - Biomedical Instrumentation Design (4)
 BME 421 - Biomedical Sensor Engineering (3)
 BME 425 - Biomedical Signal Processing (3)
 BME 437 - Biomaterials Characterization (3)
 BME 497 - Independent Study (1-3)
 BME 498 - Special Topics (1-3)
 BME 499 - Honors Undergraduate Research (1-3)
 ELE 380 - Control Systems I (4)
 MEE 427 - PLC-based Robotics in Automated Systems (3)

Track 2: Biomedical Instrumentation, Sensors and Signal Processing (19-22)

Required Courses (10)

BME 420 - Biomedical Instrumentation Design (4)
 BME 421 - Biomedical Sensor Engineering (3)
 BME 425 - Biomedical Signal Processing (3)

Elective Courses (9-12)

Choose at least 9 credit hours from the following:
 BME 435 - Biotransport (3)
 BME 436 - Advanced Biomaterials and Manufacturing (3)
 BME 437 - Biomaterials Characterization (3)
 BME 497 - Independent Study (1-3)
 BME 498 - Special Topics (1-3)
 BME 499 - Honors Undergraduate Research (1-3)
 ELE 250 - Computer Engineering I (3)
 ELE 250U - Computer Engineering I Laboratory (1)
 ELE 330 - Electronics Circuits (4)
 ELE 356 - Computer Engineering II (4)
 ELE 360 - Communication Systems (4)
 ELE 370 - Engineering Electromagnetics (3)
 ELE 380 - Control Systems I (4)
 ELE 395 - Electrical Engineering Junior Design (1)
 ELE 430 - Design with Field Programmable Logic Devices (3)
 ELE 437 - Hybrid Circuit Design (3)
 ELE 438 - Thin Film Engineering (3)
 ELE 454 - Introduction to Digital Image Processing (3)
 MEE 340 - Fluid Mechanics (3)

Total Hours for a Major in Biomedical Engineering: 103-106

Major in Electrical Engineering (B.S.)

Requirements in Department (44)

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 395 - Electrical Engineering Junior Design (1)
 ELE 495 - Senior Electrical Engineering Design I (3)
 ELE 496 - Senior Electrical Engineering Design II (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)

* Available for general education credit.

^ This is a Writing Infused Course.

*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 300 - Introduction to Probability and Statistics (3)
 UEET 101 - Introduction to Engineering (1)
 OR UEET 301 - Transition to the Profession of Engineering (1)

Electives (15)

Electives may be any ELE course numbered 400 or higher with the exception of ELE 495, ELE 496, 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 15 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 459, 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: 104-106

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

Biomedical Engineering (BME)

201. INTRODUCTION TO BIOMEDICAL ENGINEERING (3). Survey of engineering applications in medical sciences. The art and science of medicine and the process of medical diagnosis and treatment. Diagnostic instrumentation and measurements including medical imaging. Introduction to bioelectric phenomenon, biomechanics, biomaterials, biochemical engineering, computers in medicine, and biotechnology. PRQ: BIOS 208, BIOS 210, and ELE 210.

320. BIOMEDICAL ENGINEERING MEASUREMENTS (4). Lecture and laboratory that covers fundamentals of biomedical measurement and patient safety. Measurements of physical quantities by means of electronic instruments, mechanical devices and biochemical processes. Analysis of measurement systems using mathematical models. Methods of measuring signals in the presence of noise. Use of computers in measurement systems. PRQ: BME 201 and ELE 315.

330. BIOMECHANICS (3). Mechanics of deformable bodies with an emphasis on biological and physiological systems. Concepts of stress and strain, axial loading, torsion, bending, and deflection. Specific applications to mechanical properties of bone and cartilage, muscle forces and mechanics, and other biological solids. PRQ: BME 201 and MEE 209.

336. BIOMATERIALS (3). Properties of materials, protein/cell/tissue biology, metals/ceramics/ polymers and composites as biomaterials, material selection and structure-function relationship pertinent to biomedical applications, tissue-biomaterial interaction, FDA regulation, processing of biomaterials through conventional and additive manufacturing methods. PRQ: CHEM 210 and CHEM 212; or consent of department.

395. BIOMEDICAL ENGINEERING JUNIOR DESIGN (1). Introduction to the fundamentals of project design and execution, proposal writing and professional development as it pertains to the Biomedical engineering profession. Instructor facilitated, student-led uncovering the basics of project design/management, and serving to bring together relevant concepts and engineering tools towards the execution of a biomedical engineering project. Individual project proposals and projects reports required. PRQ: Junior standing or consent of the department.

420. BIOMEDICAL INSTRUMENTATION DESIGN (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). Not available for credit to students with credit in ELE 420. PRQ: BME 320 or ELE 330.

421. BIOMEDICAL SENSOR ENGINEERING (3). Theory, analysis, and design of biomedical sensors. Topics include biological components; immobilization of biological components; medical, biological, and chemical sensors; and transducers based on electrochemistry, optics, and solid state devices. Not available for credit to students with credit in ELE 421. PRQ: BME 320 or ELE 330 or ELE 335.

425. BIOMEDICAL SIGNAL PROCESSING (3). Modeling of biomedical signals and analysis of biomedical systems using both time-domain and frequency-domain techniques. Statistical description of signals in biomedical areas. 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 425 or ELE 451. PRQ: ELE 315; and either ISYE 335 or STAT 300.

435. BIOTRANSPORT (3). Understanding the movement of mass, momentum, and energy transport in living systems. Fundamental theory and governing equations will be introduced. Topics include diffusion, convection, reaction, cellular mechanics, fluid solid coupling, drug delivery, etc. PRQ: BME 330 and MEE 340.

436. ADVANCED BIOMATERIALS AND MANUFACTURING (3). Biomaterials (metallic, bioceramics, biopolymers and biocomposites), characterization of biomaterials, processing and manufacturing, design and application, interaction between the host tissue and biomaterial, physical, mechanical, and biological properties of biomaterials, drug delivery, in vitro and in vivo examination, FDA regulation. PRQ: BME 336.

437. BIOMATERIALS CHARACTERIZATION (3). Importance of characterization of physical, mechanical, chemical, and biological properties of materials; standards in properties of materials. PRQ: BME 336.

495. SENIOR BIOMEDICAL ENGINEERING DESIGN I (3). Complete preparation of an engineering system design or project covering problem identification, conceptual design and analysis, prototyping, and the development of a work schedule required to carry out the project. Includes methodology, standards and safety codes, professional ethics, decision making, design evaluations, and oral and written communication. A writing-intensive course. Offered in the fall. Students are expected to take BME 496 the following spring. PRQ: BME 395 and consent of department.

496. SENIOR BIOMEDICAL ENGINEERING DESIGN II (3). Execution of capstone design project under direct supervision of the instructor or other subject-matter expert. Students further refine and complete design solution to the engineering design problem proposed during BME 495 Senior Biomedical Engineering Design I. Students further refine and incorporate engineering design concepts, including safety and cost effectiveness, as well as employ analytical and computer tools. Team project required. A writing-infused course. The course is offered in the spring. Students are required to take BME 495 the previous fall. PRQ: BME 495.

497. INDEPENDENT STUDY (1-3). Independent pursuit of problems in biomedical 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). Advanced topics in biomedical engineering. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

- A. Bio-Nano photonics
- B. Biomaterials
- C. Advanced Prosthetics
- D. Biomedical Signal Processing
- E. Computational Biophysics
- G. Biosensing
- J. Biomedical Transport
- K. Biomedical Imaging

499. HONORS UNDERGRADUATE RESEARCH (1-3). Pursuit of an undergraduate research topic in biomedical 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 (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.

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 300.

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 either ELE 330 or BME 320.

395. ELECTRICAL ENGINEERING JUNIOR DESIGN (1). Introduction to the fundamentals of project design and execution, proposal writing and professional development as it pertains to the electrical engineering profession. Instructor facilitated, student-led, uncovering the basics of project design/management, and serving to bring together relevant concepts and engineering tools towards the execution of an electrical engineering project. Individual project proposals and projects reports required. PRQ: Junior standing, or consent of the department.

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). Not available for credit of students with credit in BME 420. PRQ: ELE 330 or BME 320.

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. Not available for credit to students with credit in BME 421. PRQ: ELE 330 or ELE 335 or BME 320.

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 or BME 425. 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. Not available for credit to students with credit in BME 425. 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 point 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 300 or ISYE 335.

457. PROCESSOR-BASED SYSTEMS (3). Analysis of contemporary processor/core based systems including desktop, laptop, tablet computers, smart phones, MP3 players, Smart TVs. Emphasis on components such as memory, display, I/O, touch screen, USB, HDMI, Wi-Fi, BT, and GPS. PRQ: ELE 356 and ELE 360.

459. SIGNAL PROCESSING DETECTION THEORY (3). Hypothesis Testing; Neyman-Pearson detector; Receiver Operating Characteristic (ROC) Curve; Bayesian detector; Composite Hypothesis Testing; Multiple Hypothesis Testing (Classification problems); detection of deterministic and random signals; detection of signals with unknown model parameters and the GLRT detector; detectors based on machine learning approaches. PRQ: ELE 360.

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.

495. SENIOR ELECTRICAL ENGINEERING DESIGN I (3). Complete preparation of an engineering system design or project covering problem identification, conceptual design and analysis, prototyping and the development of a work schedule required to carry out the project. Includes methodology, standards and safety codes, professional ethics, decision making, design evaluations, and oral and written communication. A writing-intensive course. Offered in the fall. Students are expected to take ELE 496 the following spring. PRQ: ELE 395 and consent of department.

496. SENIOR ELECTRICAL ENGINEERING DESIGN II (3). Execution of capstone design project under direct supervision of the instructor or other subject-matter expert. Further refinement and completion of design solution to the engineering design problem proposed during ELE 495, Senior Electrical Engineering Design I. Further refinement and incorporation of engineering design concepts, including safety and cost effectiveness, as well as employ analytical and computer tools. Team project required. A writing-infused course. Offered in the spring. Students are expected to take ELE 495 the previous fall. PRQ: ELE 495.

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

- Mansour Tahernezehadi, Ph.D., P.E., University of Oklahoma, professor, interim chair
- Ibrahim Abdel-Motaleb, Ph.D., P.E., University of British Columbia, professor
- Veysel Demir, Ph.D., Syracuse University, associate professor
- Hadan Ferdowski, Ph.D., Missouri University of Science and Technology, assistant professor
- Benedito Fonseca, Ph.D., University of Wisconsin, assistant professor
- Michael Haji-Sheikh, Ph.D., University of Texas, Arlington, associate professor
- Reza Hashemian, Ph.D., P.E., University of Wisconsin, professor
- Venumadhav Korampally, Ph.D., University of Missouri, assistant professor
- Wei Li, Ph.D., University of Victoria, assistant professor
- Lichuan Liu, Ph.D., New Jersey Institute of Technology, associate 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 accelerated 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 - Lean Manufacturing Systems (3)
 ISYE 460 - Facilities Planning and Design (3)
 ISYE 480 - Simulation Modeling and Analysis (3)
 ^ISYE 492 - Industrial and Systems Engineering Senior Design Project Proposal (1)
 ^ISYE 495 - Senior Design Project (3)

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)
 OR UEET 301 - Transition to the Profession of 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.

^ This is a Writing Infused Course.

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 360 - Model Building in Applied Mathematics (3)
 MATH 380 - Elementary Combinatorics (3)
 MATH 434 - Numerical Linear Algebra (3)
 MATH 435 - Numerical Analysis (3)
 MATH 439 - Applied Mathematics for Sciences and Engineering (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 400 - Probability (3),
 OR ACSC 400X - Probability (3)
 STAT 435 - Applied Regression Analysis (3)
 STAT 438 - Applied Time Series Analysis (3),
 OR ACSC 438X - Applied Time Series Analysis (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 - Lean Manufacturing Systems (3)
 ISYE 460 - Facilities Planning and Design (3)
 ISYE 480 - Simulation Modeling and Analysis (3)
 ISYE 492 - Industrial and Systems Engineering Senior Design Project Proposal (1)
 ISYE 494 - Health Systems Design Project (3)

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)
 *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)
 OR UEET 301 - Transition to the Profession of 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 - 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 492 - Industrial and Systems Engineering Senior Design Project Proposal (1)
 ^ISYE 496 - Manufacturing Systems Design Project (3)

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),
 OR MEE 423 - Mechanical Reliability (3)
 MEE 430 - Computer-Aided Design and Manufacturing (3),
 OR TECH 311 - Advanced Computer-Aided Design (3),
 OR TECH 342 - Manufacturing Component Design (3),
 OR TECH 414 - Computer-Aided Machine Design (3)
 TECH 417 - Design for Energy Efficiency and Green Materials (3),
 OR TECH 445 - Industrial Energy Utilization and Environmental Impacts (3)

Total Hours for an Emphasis in Manufacturing Systems Engineering: 108

* Available for general education credit.

^ This is a Writing Infused Course.

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 492 - Industrial and Systems Engineering Senior Design Project Proposal (1)
 ^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)
 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)
 OR UEET 301 - Transition to the Profession of 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)
 ECON 361 - Intermediate Macroeconomics (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

Accelerated 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 accelerated 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. A minimum GPA of

3.00 must be maintained during the course of study. Failure to meet the requirements of the accelerated sequence may lead to a B.S. degree only, but only after all the requirements for that degree have been met.

Students can enroll no more than three terms in the accelerated program without completing the baccalaureate degree. Up to 18 9 semester hours of graduate credit may be applied towards the baccalaureate degree with the approval of the department.

Students wishing to take part in this program should be aware of all the regulations and restrictions of accelerated baccalaureate/master's degree programs as outlined in the NIU Graduate School Catalog under the heading of Early Admission of NIU Undergraduates; and Admission to Accelerated Baccalaureate/Master's Degree Programs.

All students enrolled in this sequence must have their schedule approved by their faculty adviser each semester. Any deviation from an approved course schedule may delay graduation.

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)
 TECH 305/ENVS 305X - Green Technologies (3)

Certificates of Undergraduate Study

Students must achieve a minimum of a C in each course applied toward all certificates.

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.

* Available for general education credit.

^ This is a Writing Infused Course.

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 300 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 or STAT 300.

401. INTERNSHIP (1-3). 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 300 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 300 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 300.

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 300 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 300. 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 100 or STAT 300 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 300.

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.

470. **INTRODUCTION TO DATA ANALYTICS FOR ENGINEERS (3).** A broad introduction to the key analytical tools and techniques to effectively extract and interpret complex patterns found in large amounts of data. Reinforce statistic modeling skills and develop core skills to make informed decisions. Major topics include data manipulation and transformation, data visualization, sampling methods, classification methods, linear regression analysis. PRQ: ISYE 335 or STAT 300; and CSCI 240; or consent of the 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 300 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 300 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 either ISYE 335 or STAT 100 or STAT 300; or consent of department.

492. INDUSTRIAL AND SYSTEMS ENGINEERING SENIOR DESIGN PROJECT PROPOSAL (1). Discussion on global effects of engineering solution including social, environmental, political, economical, and ethical concerns. Emphasis on writing business case or proposal for solving industrial and systems engineering problems. Discussions on teamwork skills, engineering ethics, design cycle, project management, and professional development. PRQ: Senior standing or consent of the 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: ISYE 492 and at least three of the technical courses required for the engineering management emphasis.

494. HEALTH SYSTEMS DESIGN PROJECT (3). 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, ISYE 492, and at least three of the technical courses required for the health systems engineering emphasis, or consent of department.

495. SENIOR DESIGN PROJECT (3). 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, and ISYE 492; or consent of department.

496. MANUFACTURING SYSTEMS DESIGN PROJECT (3). 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 ISYE 492 and three of the following: 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, professor, chair

Ehsan Asoudegi, Ph.D., West Virginia University, assistant professor

Shi-Jie Chen, Ph.D., University of New York-Buffalo, professor

Omar Ghrayeb, Ph.D., New Mexico State University, professor

Jaejin Hwang, Ph.D., Ohio State University, assistant professor

Murali Krishnamurthi, Ph.D., Texas A&M University, Distinguished Teaching Professor

Reinaldo Moraga, Ph.D., University of Central Florida, associate professor

Christine Nguyen, Ph.D., University of Southern California, assistant professor

Ziteng Wang, Ph.D. North Carolina State University, assistant professor

Department of Mechanical Engineering (MEE, MCTR)

The Department of Mechanical Engineering offers upper-division curricula that leads to the B.S. in mechanical engineering, and B.S. in mechatronics engineering. The curricula are based on a strong foundation of fundamental courses in the pure sciences and engineering, and professional courses in mechanical engineering and mechatronics engineering. The curricula also provides a background in the design, analysis, development, and applications of both complete systems and a wide variety of individual system components in many different fields.

The B.S. program in Mechanical Engineering (MEE) 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 B.S. program in Mechatronics Engineering (MCTR) spans across boundaries of traditional engineering disciplines, with core courses offered by the Departments of Mechanical Engineering, Electrical Engineering, and Technology. In addition, the curriculum offers specialized mechatronics courses in which students study the integration of computing, electronics, and mechanical systems at deeper levels compared to courses the traditional disciplines. The learning environment is complemented by design and laboratory experiences.

Computers are used extensively throughout the MEE curriculum, with emphasis on interactive computer-aided design, computer-aided manufacturing, and simulation of engineering systems. In the MCTR curriculum, there is a similar emphasis on using computational tools for design and simulation. In addition, mechatronics focuses of embedding computing and computational intelligence into devices and systems. The Cooperative Education/Internship Program is also available to qualified students.

Accelerated B.S./M.S. Sequence

The department also offers an accelerated B.S./M.S. sequence that leads to a M.S. in Mechanical Engineering after students received a B.S. in Mechanical Engineering. This accelerated sequence is open to all undergraduate mechanical engineering and mechatronics engineering majors who have finished at least 90 semester hours of undergraduate course work with a minimum GPA of 3.00. A minimum GPA of 3.00 must be maintained during the course of study. Failure to meet the requirements of the accelerated sequence may lead to a B.S. only, but only after the requirements for that degree have been met.

With this program, a student can take B.S. and M.S. courses simultaneously, up to three semesters before earning the undergraduate degree. One can have up to 18 semester hours count towards both the undergraduate and graduate degrees. A GRE is not required. Students must meet Graduate School application deadlines. Interested students should talk with an adviser as early as possible and are encouraged to apply during the spring semester of their junior year.

Students wishing to take part in this program should be aware of all the regulations and restrictions of accelerated baccalaureate/master's degree programs as outlined in the NIU Graduate School Catalog under the heading of Early Admission of NIU Undergraduates; and Admission to Accelerated Baccalaureate/Master's Degree Programs.

All students enrolled in this sequence must have their schedule approved by their faculty adviser each semester. Any deviation from an approved course schedule may delay graduation.

University Honors students who are actively accumulating points through honors course work or Engage PLUS are guaranteed admission to the B.S./M.S. program.

Mission

The mission of the Mechanical Engineering Department is to provide a high-quality, visionary engineering education in both baccalaureate programs 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 and mechatronics engineering programs are designed to prepare students for successful careers in engineering by providing them with the following: a balanced education in mechanical engineering and mechatronics engineering fields, respectively; 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 programs' 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 and mechatronics engineering programs 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 and mechatronics 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.

GPA calculations will only include courses taken at NIU. For mechanical engineering students, 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.

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 203, Rhetoric and Composition II, Researched Writing in the Domains, or ENGL 204, Rhetoric and Composition, Accelerated Researched Writing in the Domains, 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 MCTR 481, MCTR 482, MEE 390, MEE 425, MEE 485, MEE 486, and MEE 490. Each of these courses requires a significant technical writing component which will be reviewed by both the course instructor and a technical writing tutor.

Major in Mechanical Engineering (B.S.)

Requirements in Department (66-67)

MEE 210 - Engineering Mechanics I (3)
 MEE 211 - Engineering Mechanics II (3)
 MEE 212 - 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 383 - Engineering Analysis (3)
 MEE 390 - Experimental Methods in Mechanical Engineering I (3)
 MEE 430 - Computer-Aided Design and Manufacturing (3)
 MEE 470 - Design of Machine Elements (3)
 MEE 485 - Senior Mechanical Engineering Design I (3)
 MEE 486 - Senior Mechanical Engineering Design II (3)
 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 382 - Design Thinking (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 427 - PLC-Based Robotics in Automated Systems (3)
 MEE 428 - Modeling Complex Systems (3)
 MEE 431 - Composite Materials (3)
 MEE 432 - Laser Materials Processing (3)
 MEE 433 - Advanced Manufacturing Processes (3)
 MEE 434 - Additive Manufacturing and Applications (3)

MEE 436 - Biomaterials (3)
 MEE 451 - Refrigeration and Air Conditioning (3)
 MEE 452 - Design of Thermal Systems (3)
 MEE 453 - Propulsion (3)
 MEE 454 - Alternative and Renewable Energy (3)
 MEE 455 - Energy Conservation and Environmental
 Sustainability (3)
 MEE 456 - Electrochemical Energy Conversion and Storage
 Systems (3)
 MEE 479 - Digital Human Modeling and Simulation (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
 IEET 450 - Patent and Copyright Law for Engineers and
 Scientists (3)
 IEET 490 - Topics in Engineering and Engineering Technology
 (1-3)
 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 (39)

*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)
 *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)
 OR UEET 301 - Transition to the Profession of Engineering (1)

Total Hours for a Major in Mechanical Engineering: 107-108

Emphasis 1. Advanced Computing and Simulation

Requirements in Department (66-67)

Same as required for major, in addition:
 ^MEE 486C - Senior Mechanical Engineering Design II: Emphasis
 in Advanced Computing and Simulation (3)
 At least two of the following three courses:
 MEE 381 - Computational Methods and Programming in
 Engineering Design (3)
 MEE 479 - Digital Human Modeling and Simulation (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 (66-67)

Same as required for major, in addition:
 ^MEE 486M - Senior Mechanical Engineering Design II: Emphasis
 in Mechatronics and Robotics (3)
 At least two of the following five 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)
 MEE 427 - PLC-Based Robotics in Automated Systems (3)
 MEE 428 - Modeling Complex Systems (3)

* Available for general education credit.

^ This is a Writing Infused Course.

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 (66-67)**

Same as required for major, in addition:

MEE 486E - Senior Mechanical Engineering Design II:
Emphasis in Sustainable Energy (3)

At least two of the following five courses:

- MEE 451 - Refrigeration and Air Conditioning (3)
- MEE 452 - Design of Thermal Systems (3)
- MEE 453 - Propulsion (3)
- MEE 454 - Alternative and Renewable Energy (3)
- MEE 455 - Energy Conservation and Environmental Sustainability (3)
- MEE 456 - Electrochemical Energy Conversion and Storage Systems (3)

Requirements outside Department (42)

Same as required for major.

Total Hours for an Emphasis in Sustainable Energy: 107-108**Major in Mechatronics Engineering (B.S.)****Requirements in Department (54-55)**

- MCTR 210 - Programming for Mechatronics (3)
 - MCTR 320 - Fundamentals of Mechatronics (3)
 - MCTR 420 - Introduction to Robotics and Automation (3)
 - MCTR 440 - Design of Mechatronic Systems (3)
 - MCTR 481 - Mechatronics Engineering Senior Design I (3)
 - MCTR 482 - Mechatronics Engineering Senior Design II (3)
 - MEE 210 - Engineering Mechanics I (3)
 - MEE 211 - Engineering Mechanics II (3)
 - MEE 212 - Mechanics of Materials (3),
OR MEE 340 - Fluid Mechanics (3)
 - MEE 270 - Engineering Graphics (3)
 - MEE 321 - Mechanical Vibrations I (3)
 - MEE 322 - Dynamic Systems and Control I (3),
OR ELE 380 - Control Systems I (4)
 - MEE 380 - Computational Methods in Engineering Design (3),
OR MEE 381 - Computational Methods and Programming in Engineering Design (3)
 - MEE 421 - Dynamic Systems and Control II (3)
- Four technical electives from the group below (12)
- ELE 430 - Design with Field Programmable Logic Devices (3)
 - ELE 437 - Hybrid Circuit Design (3)
 - ELE 454 - Introduction to Digital Image Processing (3)
 - ELE 481 - Digital Control Systems (3)
 - MCTR 421 - Human Machine Interaction Principles and Design (3)
 - MCTR 422 - Servo Drives (3)
 - MCTR 430 - Vision-based Control (3)
 - MEE 422 - Design of Robot Manipulators (3)
 - MEE 425 - Design of Mobile Robots (3)
 - MEE 427 - PLC-based Robotics in Automated Systems
 - MEE 428 - Modeling Complex Systems (3)
 - TECH 473 - Advanced Digital Design (3)

Requirements outside Departments (48)

- CSCI 240 - Computer Programming in C++ (4)
- ELE 210 - Engineering Circuit Analysis (3)
- ELE 210U - Engineering Circuit Laboratory Project (1)
- ELE 250 - Computer Engineering I (3),
OR TECH 277 - Digital Logic Design (3)
- ELE 250U - Computer Engineering I Laboratory (1),
OR TECH 277A - Digital Logic Design Laboratory (1)
- ELE 315 - Signals and Systems (3)
- ELE 330 - Electronic Circuits (4),
OR TECH 276 - Electronics I (3) AND TECH 276A - Electronics I Laboratory (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)

Total Hours for a Major in Mechatronics Engineering: 102-103**Minor in Mechanical Engineering (21)**

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 350 - Engineering Thermodynamics (3)

One of the following (3)

MEE 321 - Mechanical Vibrations I (3)

MEE 340 - Fluid Mechanics (3)

MEE 430 - Computer-Aided Design and Manufacturing (3)

MEE 470 - Design of Machine Elements (3)

Course List**Mechatronics (MCTR)**

210. PROGRAMMING FOR MECHATRONICS (3). Computer programming, focused on mechatronics applications. Object-oriented programming, analog-digital conversion, signal generation, elementary filtering algorithms, multi-threading, communication protocols, data logging and visualization. Development of microcontroller and single-board computer-based devices that interface with sensors, actuators, and the Internet. PRQ: CSCI 240. CRQ: ELE 210.

320. FUNDAMENTALS OF MECHATRONICS (3). Basic knowledge and background for mechatronics systems, sensors and actuators, architecture and programming of microcontrollers, input/output interfacing, electric circuits and components, digital circuits, communication, data acquisition and measurement, basic concept of control, and case studies of mechatronics systems. PRQ: MCTR 210.

420. INTRODUCTION TO ROBOTICS AND AUTOMATION (3). Configuration, dynamics, actuation, sensing, and perception in different types of robots including manipulators and wheeled robots. Intelligent manufacturing and teleoperation. Human factors in automation. PRQ: MCTR 320. CRQ: MEE 322 OR ELE 380.

421. HUMAN MACHINE INTERACTION PRINCIPLES AND DESIGN (3). Design principles in Human-Computer interaction, Human-Robot interaction, Humanoid robots and exoskeleton control. PRQ: MCTR 420.

422. SERVO DRIVES (3). Study of electric drives used in servo systems. Development of electric motor models through an understanding of electromagnetic systems. Discussion of power electronic circuits used in motor drives. Analysis and control of motor drive systems typically used in servo applications. PRQ: ELE 315 and ELE 330; and either MEE 209 or MEE 211.

430. VISION-BASED CONTROL (3). Computer vision techniques for three-dimensional reconstruction; Camera models; epipolar geometry; camera calibration; visual servoing, mobile and manipulator control using vision. PRQ: MCTR 420 and ELE 454.

440. DESIGN OF MECHATRONICS SYSTEMS (3). Systems level thinking for mechatronics frameworks and related design methodologies for integration of products and systems. Techniques for enabling mechatronic products and systems to meet requirements for their operation in real-time. Focus on reliability, safety, energy and environmental issues, ethics, and product liability. PRQ: MCTR 420.

481. MECHATRONICS ENGINEERING SENIOR DESIGN I (3). Complete preparation of an engineering system design or project covering problem identification, conceptual design and analysis, prototyping and the development of a work schedule required to carry out the project. Includes methodology, standards and safety codes, professional ethics, decision making, design evaluations, and oral and written communication. A writing intensive course. Offered in the fall. Students are expected to take MCTR 482 the following spring. PRQ: MCTR 420. CRQ: MCTR 440.

482. MECHATRONICS ENGINEERING SENIOR DESIGN II (3). Execution of capstone design project under direct supervision of the instructor or other subject-matter expert. A writing intensive course. Specific sections of the course are offered to students pursuing an emphasis in mechanical engineering. Offered in the spring. Students are expected to take MCTR 481 the previous fall. PRQ: MCTR 481.

Mechanical Engineering (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.

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, PHYS 273 with grade of C or better, and MEE 212.

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.

382. DESIGN THINKING (3). A semester-long process of applying Design Thinking to come up with solutions to so-called "wicked problems" that are open ended and often ill defined. The process consists of formal steps and techniques to understand and empathize with users' perspectives; to produce a coherent vision out of messy problems; to generate a wide variety of possible solutions; and to develop low fidelity prototypes to be tested and evaluated. Brings together student innovators with varied backgrounds and viewpoints, enabling breakthrough insights and solutions to emerge from the diversity. PRQ: COMS 100, ENGL 203.

383. ENGINEERING ANALYSIS (3). Concepts from linear algebra and differential equations applied to a broad set of engineering analysis problems. Use of computational tools to analyze such problems. Communication of analysis results. PRQ: 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 and MEE 350.

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.

427. PLC-BASED ROBOTICS IN AUTOMATED SYSTEMS (3). Fundamental concepts and architecture of Programmable Logic Controllers (PLCs), ladder logic programming, and interfacing/integration of sensors, switches, actuators, and other automation components such as a vision system. Case studies of automated systems controlled by PLCs in industry and robotics. Control of a robot system using commercial PLCs. PRQ: CSCI 240; and either MEE 322 or ELE 380.

428. MODELING COMPLEX SYSTEMS (3). Graph theory, network models, mean field approximation, phase portraits, bifurcation diagrams, information theory, and game theory. Modeling of disease/rumor spread, self-propelled particle systems, socio/economic networks, power grids, multi-agent robotic systems, coupled-oscillator dynamics, and self-repeating patterns such as those found in ant nests, disease tumors, and vehicular traffic. PRQ: MEE 321 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 or consent of department.

431. COMPOSITE MATERIALS (3). Fiber and matrix properties, micromechanical and macromechanical behavior of lamina, lamination theory. PRQ: MEE 212, MEE 330, and MEE 380 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.

434. ADDITIVE MANUFACTURING AND APPLICATIONS (3). Materials and their properties, additive manufacturing processes versus conventional methods, different additive manufacturing techniques, the significance and limitation of each method. Hands on lab experience to familiarize students with processes. PRQ: MEE 331 or consent of department.

436. BIOMATERIALS (3). Properties of materials, protein/cell/tissue biology, metals/ceramics/ polymers and composites as biomaterials, material selection and structure-function relationship pertinent to biomedical applications, tissue-biomaterial interaction, FDA regulation, processing of biomaterials through conventional and additive manufacturing methods. PRQ: MEE 330 or consent of department.

451. REFRIGERATION AND AIR CONDITIONING (3). Refrigerants; vapor compression and absorption refrigeration systems; cryogenics; psychrometrics and humidity measurements; extended surface coils and transfer processes between moist air and water; solar radiation and heating and cooling loads of buildings and structures. PRQ: MEE 350 and MEE 352.

452. DESIGN OF THERMAL SYSTEMS (3). Application of principles of fluid mechanics, heat transfer, and thermodynamics in the component design of thermal systems. Examples are drawn from power generations, 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.

456. **ELECTROCHEMICAL ENERGY CONVERSION AND STORAGE SYSTEMS (3).** Working principles, characteristic behaviors of operation, and key issues in development of various electrochemical energy systems including fuel cells and batteries, understanding key design factors improving the system performance, analyzing the performance and efficiencies of those systems with theories based on electrochemistry, thermodynamics, and transport phenomena. PRQ: MEE 330 and MEE 352, or consent of department.

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.

479. **DIGITAL HUMAN MODELING AND SIMULATION (3).** Fundamentals of using computational methods to simulate the human musculoskeletal system as articulated kinematic chains. Use of methods adapted from robot kinematics and dynamics, coupled with joint biomechanics and joint strength profiles. Prediction of serial link motion of the human body and associated physical demands and limitations. PRQ: MEE 320, and MEE 380 or MEE 381.

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.

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.

485. **SENIOR MECHANICAL ENGINEERING DESIGN I (3).** Complete preparation of an engineering system design or project covering problem identification, conceptual design and analysis, prototyping and the development of a work schedule required to carry out the project. Includes methodology, standards and safety codes, professional ethics, decision making, design evaluations, and oral and written communication. A writing-intensive course. Offered in the fall. Students are expected to take MEE 486 the following spring. PRQ: MEE 320, MEE 321, and MEE 340. CRQ: MEE 470.

486. **SENIOR MECHANICAL ENGINEERING DESIGN II (3)** Execution of capstone design project under direct supervision of the instructor or other subject-matter expert. A writing-intensive course. Specific sections of the course are offered to students pursuing an emphasis in mechanical engineering. Offered in the spring. Students are expected to take MEE 485 the previous fall. PRQ: MEE 485.

C. Emphasis in Advanced Computing and Simulation

E. Emphasis in Sustainable Energy

M. Emphasis in Mechatronics and Robotics

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 9 semester hours, with no more than 3 semester hours in the same topic. PRQ: Consent of department.

Mechanical Engineering Faculty

Sachit Butail, Ph.D., University of Maryland, College Park, assistant professor

Kyu Taek Cho, Ph.D., Pennsylvania State University, assistant professor

Brianno Collier, Ph.D., Cornell University, Presidential Teacher Professor

Jenn-Terng Gau, Ph.D., Ohio State University, professor

Nicholas A. Pohlman, Ph.D., Northwestern University, associate professor

Ji-Chul Ryu, Ph.D., University of Delaware, assistant professor

Iman Salehinia, Ph.D., Washington State University, assistant professor

Federico Sciammarella, Ph.D., Illinois Institute of Technology, associate professor

John Shelton, Ph.D., University of South Florida, assistant professor

Scott R. Short, Ph.D., P.E., University of Dayton, assistant professor

Robert Sinko, Ph.D., Northwestern University, assistant professor

Jifu Tan, Ph.D., Lehigh University, assistant professor

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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.

Students who graduate with university honors with a B.S. in Technology receive guaranteed admission into the graduate program leading to the M.S. in Industrial Management. Students who are interested in the M.S. in Industrial Management should refer to the Graduate Catalog or contact the University Honors Program for more details.

Mission

The mission of the Department of Technology is to offer engaged learning programs that promote strong partnerships with industry and foster a synergetic, interactive relationship between faculty and students. The Department of Technology is committed to provide our students with an industry-focused technical education that emphasizes theoretical and applications-oriented approaches to problem solving. The departmental faculty will strive to provide technical programs which allow our students to excel in current and future industrial settings.

Vision

The Department of Technology is committed to technical education and programs which incorporate continuous improvement, student-centered engagement, and applied research that prepare our students to analyze, develop, and implement innovative and sustainable solutions for a contemporary society.

Educational Objectives

As a statement of the career and professional accomplishments that the Department of Technology is preparing its graduates to achieve, we have adopted the following Educational Objectives, in consultation with our alumni, Industrial Advisory Boards, and other program stake holders:

- Apply scientific, mathematical, and engineering principles to analyze, develop, and implement systems.
- Communicate effectively and work cohesively on team-based projects.
- Apply technical knowledge demanded by today's innovation driven industrial workplace.
- Understand the need for continued professional development to enhance technical and professional skills.
- Develop applied solutions that meet ethical, cultural, and environmental needs of society.

Program Outcomes

The department's undergraduate program is designed to provide graduates with:

A. An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities

B. An ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

C. An ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes

D. An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives

E. An ability to function effectively as a member or leader on a technical team

F. An ability to identify, analyze, and solve broadly-defined engineering technology problems

G. An ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature

H. An understanding of the need for and an ability to engage in self-directed continuing professional development

I. An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity

J. A knowledge of the impact of engineering technology solutions in a societal and global context

K. A commitment to quality, timeliness, and continuous improvement

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 (67-68)

- 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 - Presentation and Communication Skills for Technology (3),
OR ^ENGL 308 - Technical Writing (3),
OR ^MGMT 346 - Business Communications (3)
- TECH 325 - Programmable Electronic Controllers (3)
- TECH 375 - Control Systems (3)
- TECH 376 - Electronics II (3)
- TECH 376A - Electronics II Laboratory (1)
- TECH 377 - Microcontrollers and Interfacing (3)
- TECH 379 - Electric Machines and Transformers (3)
- TECH 379A - Electric Machines and Transformers Laboratory (1)

TECH 426 - Electric Systems Applications for Alternative Energy (3)
 ^TECH 477 - Engineering Technology Senior Design Project I (1)
 ^TECH 478 - Engineering Technology Senior Design Project II (3)
 Select five of the following (15-16)

TECH 295 - Manufacturing Computer Applications (3),
 OR CSCI 215 - Visual Basic (4)
 TECH 305 - Green Technologies (3)
 TECH 391 - Industrial Quality Control (3)
 TECH 393 - Structure and Properties of Materials (3)
 TECH 409 - Internship (3)
 TECH 415 - Applied Industrial Experimental Analysis (3)
 TECH 417 - Design for Energy Efficiency and Green Materials (3)
 TECH 419 - Energy Auditing (3)
 ^TECH 434 - Human Factors in Industrial Accident Prevention (3)
 TECH 443 - Engineering Economy (3)
 TECH 444 - Production Control Systems (3)
 TECH 445 - Industrial Energy Utilization and Environmental Impacts (3)
 TECH 492 - Manufacturing Distribution Applications (3)

Select three of the following (9)

TECH 211 - Computer-Aided Design (3)
 TECH 425 - Advanced Programmable Electronic Controllers (3)
 TECH 430 - Microcontroller Systems and Internet of Things (3)
 TECH 471 - Digital and Data Communication (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)

Requirements outside Department (30-31)

*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)
 PHYS 211 - General Physics II (4)
 *STAT 100 - Basic Statistics (3),
 OR STAT 200 - Elementary Statistics (4)

Total Hours for Emphasis 1, Electrical Engineering Technology: 100-102

Emphasis 2. Manufacturing Engineering Technology

Requirements in Department (78-79)

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)
 OR CSCI 240 - Computer Programming in C++ (4)
 TECH 302 - Presentation and Communication Skills for Technology (3),
 OR ^ENGL 308 - Technical Writing (3),
 OR ^MGMT 346 - Business Communications (3)
 TECH 311 - Advanced Computer-Aided Design (3)
 TECH 325 - Programmable Electronic Controllers (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 423 - Automated Manufacturing Systems (3)
 TECH 425 - Advanced Programmable Electronic Controllers (3)
 TECH 443 - Engineering Economy (3)
 TECH 462 - CNC Production Programming (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 314 - Tool and Die Design (3)
 TECH 344 - Materials and Processes in the Plastics Industry (3)
 TECH 365 - Metrology (3)
 TECH 414 - Computer-Aided Machine Design (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 407 - Maintenance Management Technology (3)
 TECH 409 - Internship (3)
 TECH 419 - Energy Auditing (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 492 - Manufacturing Distribution Applications (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 100 - Basic Statistics (3),
 OR STAT 200 - Elementary Statistics (4)

Total Hours for Emphasis 2, Manufacturing Engineering Technology: 100-102

Emphasis 3. 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 (72-75)

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 - Presentation and Communication Skills for Technology (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)

* Available for general education credit.

^ This is a Writing Infused Course.

Two of the following (6)

- TECH 305 - Green Technologies (3)
- TECH 402 - Industrial Training and Evaluation (3)
- TECH 407 - Maintenance Management Technology (3)
- TECH 411 - Environmental Sustainability Practices for Industrial Operations (3)
- TECH 419 - Energy Auditing (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)

One of the following areas of study (23-24)

Design and Production (24)

- TECH 260 - Metal Fabrication Processes (3)
 - TECH 262 - Machine Production Processes (3)
 - TECH 311 - Advanced Computer-Aided Design (3)
 - TECH 312 - Design Dimensioning and Tolerancing (3)
 - TECH 313 - Product Design and Development for Manufacturability (3)
 - TECH 365 - Metrology (3)
- Two of the following (6-7)
- TECH 295 - Manufacturing Computer Applications (3),
OR CSCI 215 - Visual Basic (4)
OR CSCI 240 - Computer Programming in C++ (4)
 - TECH 314 - Tool and Die Design (3)
 - TECH 325 - Programmable Electronic Controllers (3)
 - TECH 344 - Materials and Processes in the Plastics Industry (3)
 - TECH 409 - Internship (3)
 - TECH 414 - Computer-Aided Machine Design (3)
 - TECH 417 - Design for Energy Efficient and Green Materials (3)

Electronics Technology (22-23)

- 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)
OR CSCI 240 - Computer Programming in C++ (4)
 - TECH 325 - Programmable Electronic Controllers (3)
 - TECH 377 - Microcontrollers and Interfacing (3)
 - TECH 425 - Advanced Programmable Electronic Controllers (3)
- Two of the following (6)
- TECH 398 - Individual Problems in Technology (3)
 - TECH 409 - Internship (3)
 - TECH 430 - Microcontroller Systems and Internet of Things (3)
 - TECH 473 - Advanced Digital Design (3)
 - TECH 479 - Special Topics in Engineering Technology (3)

Environmental Health and Safety (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 432 - Disaster Preparedness (3)
 - TECH 433 - Chemical Hazards in Industry (3)
 - TECH 435 - Legal Aspects of Safety (3)
 - TECH 438 - Safety in Transportation Systems (3)
 - TECH 468 - Construction Safety Management (3)
 - TECH 485 - Risk Management (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 150 - Physics (3) AND *PHYS 151 - Physics Laboratory (1),
OR *PHYS 210 - General Physics I (4)
- *STAT 100 - Basic Statistics (3),
OR STAT 200 - Elementary Statistics (4)

Total hours for Emphasis 3, Industrial Technology: 89-93

Emphasis 4. Energy and Environmental Technology

Requirements in Department (61-62)

- TECH 175 - Electricity and Electronics Fundamentals (3)
- TECH 175A - Electricity and Electronics Fundamentals Laboratory (1)
- TECH 211 - Computer-Aided-Design (3)
- TECH 231 - Safety Programs (3)
- *TECH 245 - Pollution Prevention and Sustainable Production (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 - Presentation and Communication Skills for Technology (3),
OR ^ENGL 308 - Technical Writing (3),
OR ^MGMT 346 - Business Communications (3)
- TECH 305/ENVS 305X - Green Technologies (3)
- TECH 325 - Programmable Electronic Controllers (3)
- TECH 326 - Fluid Power Technology (3)
- TECH 391 - Industrial Quality Control (3)
- TECH 406 - Facilities Management Technology (3)
- TECH 407 - Maintenance Management Technology (3)
- TECH 411 - Environmental Sustainability Practices for 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 443 - Engineering Economy (3)
- TECH 445 - Industrial Energy Utilization and Environmental Impacts (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 409 - Internship (3)
- TECH 415 - Applied Industrial Experimental Analysis (3)
- TECH 426 - Electric Systems Applications for Alternative Energy (3)
- TECH 427 - Testing Methods, Procedures, and Selection of Sustainable Plastics (3)
- TECH 437 - Fundamentals of Industrial Hygiene (3)
- TECH 441 - Hazard Control in Industrial Operations (3)
- TECH 479 - Special Topics in Engineering Technology (3)

* Available for general education credit.

^ This is a Writing Infused Course.

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 150 - Physics (3) AND *PHYS 151 - Physics Laboratory, OR *PHYS 210 - General Physics I (4)
 *STAT 100 - Basic Statistics (3), OR STAT 200 - Elementary Statistics (4)

Total Hours for Emphasis 4, Energy and Environment Technology: 94-96**Emphasis 5. 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)
 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 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 (14)

*CHEM 110 - Chemistry (3)
 *CHEM 111 - Chemistry Laboratory (1)
 *MATH 155 - Trigonometry and Elementary Functions (3)
 *PHYS 150 - Physics (3) AND *PHYS 151 - Physics Laboratory, OR *PHYS 210 - General Physics I (4)
 *STAT 100 - Basic Statistics (3)

Total Hours for Emphasis 5, Applied Manufacturing Technology: 93**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>.

Certificates of undergraduate study in the Department of Technology are open to all NIU undergraduate students. Students must maintain good academic standing in the university by achieving a GPA of at least 2.00 in all certificate courses and by completing 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 Technology reserves the right to limit enrollment in any of the certificate courses.

Energy Management (12)

This certificate is designed to provide students fundamental knowledge in energy sciences with an emphasis in industrial applications. This certificate is not available to students majoring in technology with an emphasis in energy and environmental technology.

TECH 305/ENVS 305X - Green Technologies (3)
 OR TECH - 484 Energy Management (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)

Facilities Management (12)

This certificate is designed to prepare students to meet needs to manage industrial/manufacturing facilities in the industry. Through this certificate, students will obtain fundamental knowledge in design, maintenance, and management of industrial/manufacturing facilities, projects, and operations.

TECH 406 - Facilities Management Technology (3)
 TECH 407 - Maintenance Management Technology (3)
 TECH 429 - Plant Location, Layout, and Materials Handling (3)
 TECH 442 - Work Simplification and Measurement (3)
 OR TECH 444 - Production Control Systems (3)

Course List

175. ELECTRICITY AND ELECTRONICS FUNDAMENTALS (3). Fundamentals of DC and AC circuits, network laws and theorems, passive circuit components, semiconductors, electric machines, and digital systems. PRQ: MATH 155 with a C or better, PHYS 150 and PHYS 151, 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.

231. SAFETY PROGRAMS (3). Review and application of contemporary approaches to recognition, evaluation, and control of workplace hazards. Use and limitations of federal safety standards.

* Available for general education credit.

^ This is a Writing Infused Course.

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 either PHYS 211 with a C or better, or PHYS 273 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: Either PHYS 210 or PHYS 253, and 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 with a grade of C or better 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. PRESENTATION AND COMMUNICATION SKILLS FOR TECHNOLOGY (3). Technical communication methodologies, data analysis and presentation using manual and electronic tools and techniques in written and oral formats. Utilization of Microsoft's Office 365 Suite for managing data, graphics and textual information. Integration of proper writing techniques, data, and theory into technical reports and short communications using drawings, charts, and graphs for industrial applications. Use of numerous hands-on exercises related to technology to enhance learning and knowledge retention. PRQ: ENGL 103.

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.

311. ADVANCED COMPUTER-AIDED DESIGN (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, TECH 311, 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 and TECH 265.

325. PROGRAMMABLE ELECTRONIC CONTROLLERS (3). Basic concepts and skills needed to wire, program and apply programmable electronic controllers in industry. Discrete I/O devices and ladder logic programming will be studied, including basic and intermediate PLC functions. Experiments on operation, programming and industrial applications. PRQ: TECH 175, TECH 175A, TECH 265; and CSCI 215 or CSCI 240 or TECH 295.

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 150 and PHYS 151, or PHYS 210; and MATH 229; or consent of department.

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, setup and operations. 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.

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 100 or STAT 200, 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. PRQ: STAT 100.

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. PRQ: MATH 155 with a C or better; and TECH 211.

407. MAINTENANCE MANAGEMENT TECHNOLOGY (3). Concepts and theories of preventive, predictive, and total productive maintenance (TPM). Statistical concepts relevant to maintenance. Operation improvement through TPM. PRQ: Either STAT 100 or STAT 200; and TECH 265; or consent of department.

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. ENVIRONMENTAL SUSTAINABILITY PRACTICES FOR 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: MATH 155 with a C or better, and TECH 245 or TECH 305, 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 150, PHYS 151, TECH 265, and TECH 311.

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 100.

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; PHYS 150 and PHYS 151, 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; PHYS 150 and PHYS 151, 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.

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 325 and TECH 326, or consent of department.

425. ADVANCED PROGRAMMABLE ELECTRONIC CONTROLLERS (3). PLC applications in automation including analog process control, and advanced PLC functions, communications and networking, HMIs, computer based controls and remote I/O systems. Interfacing with sensors and instrumentation. Emphasis on laboratory experiences with communications, networking, remote I/O applications, PC based controls and interfacing. PRQ : TECH 325.

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, TECH 276 and TECH 276A; or consent of department.

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. MICROCONTROLLER SYSTEMS AND INTERNET OF THINGS (3). Advanced microcontroller-based systems for embedded control applications involving Internet of Things. Topics include microcontroller programming and interfacing, application of microcontrollers in system control, automation, instrumentation, and communication. PRQ: CSCI 240 and 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). *Crosslisted as UNIV 310X*. 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 310X.

433. CHEMICAL HAZARDS IN INDUSTRY (3). Basic concepts of chemical hazards as it relates to materials used in business and industrial work places. Assessment of the hazards of chemicals and how to manage them safely. PRQ: MATH 155 with a C or better, CHEM 110, and CHEM 111; and either TECH 231 or TECH 245.

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 and application of current safety management systems. Preparation of topic-specific safety programs and procedures. Development of a business case for implementing changes in safety practices. PRQ: TECH 231, TECH 434, or consent of department.

437. FUNDAMENTALS OF INDUSTRIAL HYGIENE (3). Application of principles of industrial (or occupational) hygiene for the safety specialist, whose role has been greatly expanded by legislation and current industry practices. Emphasis on recognition and evaluation of stress-producing conditions in the workplace including chemical exposure, noise, ventilation, temperature, radiation, lighting, and their effect on human performance and productivity. PRQ: CHEM 110, CHEM 111, TECH 231, TECH 415; or consent of department.

438. SAFETY IN TRANSPORTATION SYSTEMS (3). Status of, and rationale for, improvements in safety practices and legislation for the commercial carriers (rail, pipeline, highway, water, and air transportation). Each student investigates one system in depth. PRQ: CHEM 110 and CHEM 111 and MATH 155 with a C or better; TECH 231 and TECH 245; 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 150, PHYS 151, 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 150, PHYS 151, 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.

462. CNC PRODUCTION PROGRAMMING (3). The use of Computer-Aided Manufacturing (CAM) software to program CNC vertical machining and turning centers. PRQ: TECH 311 and TECH 362.

468. CONSTRUCTION SAFETY MANAGEMENT (3). Identification, assessment, and control of construction-specific safety hazards. Management of safety on multiemployer construction worksites. PRQ: MATH 155 with a C or better; PHYS 150 and PHYS 151 or PHYS 210; and TECH 231.

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 376.

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: CSCI 240 and 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 and choose from one of the following sets of courses: either TECH 375 and TECH 376 and TECH 377; OR TECH 369 and 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 150 and PHYS 151, 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 150 and PHYS 151, or PHYS 210, TECH 231, TECH 245, TECH 434, and TECH 441, 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, 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: MATH 155 with a C or better, TECH 265, and STAT 100 or STAT 200, 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

Pradip Majumdar, interim chair

Abul Azad, Ph.D., University of Sheffield (United Kingdom), professor

Liping Guo, Ph.D., Auburn University, associate professor

Theodore J. Hogan, Ph.D., C.I.H., University of Illinois, Chicago, associate professor

Sarveswara (Rao) Kilaparti, Ph.D., Northwestern University, associate professor

Kevin Martin, Ph.D., University of Missouri, associate professor

William J. Mills, Ph.D., University of Illinois, Chicago, assistant professor

Shanthi Muthuswamy, Ph.D., University of New York, associate professor

Andrew W. Otieno, Ph.D., University of Leeds (Britain), Presidential Engagement 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, associate professor

Robert Tatara, Ph.D., Northwestern University, professor

Mahdi Vaezi, Ph.D., University of Alberta, assistant 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.). The College of Health and Human Sciences offers a contract major leading to the B.S. degree.

The undergraduate offerings in the College of Health and Human Sciences prepare students for entry into specialized career and professional fields as well as 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); 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 communicative disorders

School of Family and Consumer Sciences

B.S. in fashion merchandising

B.S. in hospitality and tourism management

B.S. in human development and family sciences ¹

School of Health Studies

B.S. in medical laboratory sciences

B.S. in nutrition, dietetics, and wellness

B.S. in public health

School of Interdisciplinary Health Professions

B.S. in health sciences

B.S. in rehabilitation and disability services

Department of Military Science

School of Nursing

B.S. in nursing ¹

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.

For Students in Educator Licensure Programs

Candidates who successfully complete the program and pass the state-mandated Teacher Performance Assessment will have completed all required ISBE and CAEP standards for receiving university recommendation for licensure. Successful completion of the program without receipt of a passing score on the state-mandated Teacher Performance Assessment may result in the candidate receiving a degree without university recommendation for licensure.

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.

Interdisciplinary Courses Offered by the College of Health and Human Sciences

Gerontology (GERO, HDFS)

GERO 365. OVERVIEW OF GERONTOLOGY (3). Foundational concepts of aging and social gerontology. Examines classic and contemporary readings emphasizing the biopsychosocial aspects of aging from personal relationships to cultures, policies, financial aspects, programs for health improvement, and societal infrastructure. PRQ: Junior standing or consent of program.

GERO 366. HEALTH ASPECTS OF AGING (3). *Crosslisted as COMD 366X.* General study of aging from the perspective of the individual, with an emphasis on the concept of successful aging from a life course philosophy constrained by physical and cognitive changes and influenced by biological, psychological, and social aspects of the aging process. PRQ: Junior standing or consent of program.

GERO 369. DEMENTIA STUDIES (3). Introduction to the complexities of dementia as a disease, as experienced by the individual, family unit, and society. Incorporates biomedical, social-psychological, and social-gerontological perspectives. PRQ: GERO 365 or consent of program.

GERO 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. CRQ: GERO 365 and junior standing or consent of program.

GERO 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. CRQ: GERO 467A.

GERO 467A. PRE-PRACTICUM SEMINAR (1). Preparation for applied fieldwork experience (GERO 467). Emphasizes aging-related social values, gerontological practice skills, professional decision making and communication. Builds on existing gerontological academic foundation to add knowledge and skills necessary for productive and safe functioning in identified fieldwork setting. S/U grading may be used. PRQ: GERO 365 or consent of program.

GERO 468. LEADERSHIP IN AGING SERVICES (3). Study of the administration of aging services emphasizing non-clinical leadership roles and personnel management. Focus on provision and oversight of quality services along the delivery continuum. Management and leadership topics, including personnel policy, pertinent to institutional and community needs. PRQ: PHHE 433 and GERO 365 or consent of program.

HDFS 465. THEORIES AND ISSUES IN AGING STUDIES (3). Advanced interdisciplinary examination of aging and the older adult population. Includes physiological, psychosocial, health, health promotion, and theoretical aspects of aging. PRQ: GERO 365 or consent of program.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

Interdisciplinary Health and Human Sciences (UHHS)

UHHS 101. ORIENTATION TO HEALTH AND HUMAN SCIENCES (1). Introduction to majors within the College of Health and Human Sciences. Evaluation of students' interests, abilities, and expectations in relation to requirements for completion of majors within the College of Health and Human Sciences.

UHHS 200. EXPERIENCES IN HEALTH AND HUMAN SCIENCES I (3-30). Approved introductory experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with UHHS 300, Experiences in Health and Human Sciences II, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of college.

UHHS 300. EXPERIENCES IN HEALTH AND HUMAN SCIENCES II (3-30). Approved experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with UHHS 200, Experiences in Health and Human Sciences I, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of college.

UHHS 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.

UHHS 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. S/U grading may be used. PRQ: CHHS major with at least junior standing; or consent of college.

School of Allied Health and Communicative Disorders (AHCD, AHPT, COMD)

The School of Allied Health and Communicative Disorders offers a major in communicative disorders (B.S.) and a minor in communicative disorders. Students interested in one of the school's academic programs 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.

Major in Communicative Disorders (B.S.)

Students in this major may combine interests in communicative disorders with preparation for advanced study in fields such 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.

A select number of seats in the master's program in communicative disorders with a specialization in speech-language pathology are reserved for incoming freshman University Honors students who meet the stated program criteria. Program criteria and requirements are available from the NIU University Honors Program and the School of Allied Health and Communicative Disorders.

Requirements in School (34-35)

- *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 (6-7)
 - AHCD 480 - Internship: Allied Health and Communicative Disorders (3)
 - OR GERO 467- Fieldwork in Gerontology (3)
 - AND GERO 467A - Pre-Practicum Seminar (1)
 - COMD 421 - Aural Rehabilitation (3)
 - COMD 423 - Developmental Speech and Language Disorders (3)
 - COMD 424 - Acquired Speech and Language Disorders (3)
 - REHB 495 - Assistive Technology in Rehabilitation (3)
 - OR SESE 461 - Assistive Technology for Individuals with Autism and Multiple Disabilities (3)

Requirements outside School (24-27)

- *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)
- HSCI 318 - Medical Terminology (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)
- **REHB 200 - Disability in Society (3)
- REHB 493 - Counseling in Communicative Disorders (3)
- *STAT 100 - Basic Statistics (3),
 - OR STAT 200 - Elementary Statistics (4)
- One of the following (3)
 - COMD 366X - Health Aspects of Aging (3)
 - GERO 365 - Overview of Gerontology (3)
 - HDFS 486 - Aging and the Family (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)

Special Requirement

Students are required to complete a minor selected with program approval.

Total Hours for a major in Communicative Disorders: 70-78

Minor in Communicative Disorders (18)

- COMD 220 - Introduction to Communicative Disorders (3)
- Electives in communicative disorders and/or rehabilitation services chosen from the following: (15)
 - 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)
- Six or more semester hours in the minor must be taken at NIU.

Course List

Allied Health and Communicative Disorders (AHCD)

- 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. May be repeated to a maximum of 12 semester hours.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

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 majors may repeat to a maximum of 6 semester hours. 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.

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 and audiologists 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.

301. HEARING CONSERVATION (2). Background in noise and hearing, rules and regulations of workplace noise exposure, hearing protection, industrial hearing conservation programs, and safe management of personal listening choices. PRQ: MATH 155 with a grade of C or better, or consent of school.

305 LANGUAGE DEVELOPMENT (3). 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: COMD 221; and MATH 155 or MATH 210; and PHYS 150 or PHYS 180 or PHYS 210. 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.

366X. HEALTH ASPECTS OF AGING (3). *Crosslisted as GERO 366.* General study of aging from the perspective of the individual, with an emphasis on the concept of successful aging from a life course philosophy constrained by physical and cognitive changes and influenced by biological, psychological, and social aspects of the aging process. PRQ: Junior standing.

421. AURAL REHABILITATION (3). Theory and methods of habilitation/rehabilitation for communication disorders associated with hearing impairment across the life span. PRQ: 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. ACQUIRED SPEECH AND LANGUAGE DISORDERS (3). Introduction to the identification, measurement, and treatment of neurogenic communication disorders, fluency, 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 100 or STAT 200. 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, professional roles, ethical and legal issues, and current issues of physical therapy and rehabilitation. PRQ: Health sciences major and senior standing, or consent of school.

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
 Danica Billingsly, Au.D., Salus University, clinical assistant professor
 Mary Jo Blaschak, Ph.D., Northwestern University, associate professor
 Mariah Cheyney, Au.D., University of Pittsburgh, clinical assistant professor
 King Chung, Ph.D., Northwestern University, professor
 Allison Gladfelter, Ph.D., Purdue University, assistant professor
 In-Sop Kim, Ph.D., Florida State University, associate professor
 Blythe Kitner, Au.D., Rush University, clinical assistant professor
 Robert LeBeau, D. Sc., Texas Tech University, assistant professor
 Jamie F. Mayer, Ph.D., Indiana University, associate professor
 Christina Odeh, D.H.Sc., University of Indianapolis, assistant professor
 Janet L. Olson, Ph.D., Northern Illinois University, associate professor
 Charles Pudrith, Ph.D., Au.D., University of North Carolina, at Greensboro, assistant professor
 Matthew J. Wilson, Ph.D., University of Tennessee Health Science Center, associate professor

School of Family and Consumer Sciences (FACS, FSMD, HDFS, HOSP)

The School of Family and Consumer 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 and Consumer 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 and Consumer Sciences, such a possibility exists in FSMD 256, FSMD 356, FSMD 474, HDFS 293, HDFS 294, HDFS 393, HDFS 394, HDFS 398, HDFS 490, HDFS 491, HDFS 493, HOSP 296, HOSP 396, HOSP 495, SEEC 485A, and SEEC 485B. A statement of grounds for dismissal is available from the coordinator of each internship.

The School of Family and Consumer 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 and Consumer Sciences should take chemistry and biology in high school.

Comprehensive Major in Human Development and Family Sciences (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.

Limited Retention Requirements for Human Development and Family Sciences

All students will enter Human Development and Family Sciences as a major with one of three emphases: Family and Individual Development, Child Development, or Family Social Services.

In order to continue enrollment in Family Social Services or Child Development, students must maintain a 2.40 cumulative NIU GPA after a total of 45 post-secondary semester hours earned and a grade of C or better in the following courses:

ENGL 203 - Rhetoric and Composition II, Researched Writing in the Domains (3),
OR ENGL 204 - Rhetoric and Composition, Accelerated Researched Writing in the Domains (3),
OR pass the English foundational studies exam
MATH 110 - College Algebra (3),
OR STAT 100 - Basic Statistics (3),
OR meet the Math foundational studies (MATH 101, MATH 155, MATH 201, MATH 210, A.S. or A.A. degree)
PSYC 102 - Introduction to Psychology (3)
SOC 170 - Introduction to Sociology (3)
HDFS 230 - Child Development (3),
OR EPS 307- Development of the Adolescent (3) (for family social services only)
HDFS 280 - Human Development, the Family, and Society (3)
HDFS 284 - Introduction to Family Relationships (3)

Additionally, Child Development or Family Social Services majors beyond 45 post-secondary semester hours, students must maintain a 2.40 NIU GPA and obtain a grade of C or better in the following courses:

Child Development: HDFS 330, HDFS 331, HDFS 332, HDFS 399, and HDFS 490.
Family Social Services: HDFS 382, HDFS 383, HDFS 491, and HDFS 481.

Students not meeting these requirements will be changed to emphasis 1, Family and Individual Development.

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 human development and family sciences 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 (39)

HDFS 180 - Personal Development and the Family (3)
*HDFS 207 - The Consumer (3),
OR *NUTR 201 - Human Nutrition (3)
OR NUTR 405 - Child Health and Nutrition (3),
OR PHHE 406 - Dimensions of Human Sexuality (3),
*HDFS 230 - Child Development (3)
*HDFS 280 - Human Development, the Family, and Society (3)
HDFS 284 - Introduction to Family Relationships (3)
HDFS 343 - Family Financial Planning (3)
^HDFS 445 - Management of Human and Family Resources (3)
HDFS 477 - Domestic Violence and Trauma in the Family (3)
HDFS 484 - Family Theories (3)
Four of the following (12)
*HDFS 384 - Asian American Families (3)
HDFS 398 - Cooperative Education for Family and Individual Development (3)
^HDFS 432 - Theories of Child Development (3)
HDFS 437 - Parent-Child Interaction From Birth to 8 Years (3)
HDFS 438 - Parent Education (3)
HDFS 482 - Child Abuse and Neglect (3)
HDFS 483 - Social Policy, Children and Families (3)
HDFS 485 - Methodology in Family Life Education (3)
HDFS 486 - Aging and the Family (3)
HDFS 487- Overview of Marriage and Family Therapy (3)
*HDFS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

Requirements outside School (24-26)

One of the following (3-4)

- ^ENGL 350 - Writing Across the Curriculum (3)
- HSCI 350 - Critical Thinking for Health and Human Services Professionals (3)
- *MATH 155 - Trigonometry and Elementary Functions (3)
- *MATH 210 - Finite Mathematics (3)
- *MATH 211 - Calculus for Business and Social Science (4)
- *MATH 229 - Calculus I (4)
- *PHIL 105 - Logic and Critical Reasoning (3)
- *EPS 307 - Development of the Adolescent (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)
- *SOCI 170 - Introduction to Sociology (3)
- *SOCI 260 - Introduction to Social Psychology (3),
OR PSYC 372 - Social Psychology (3)
- *STAT 100 - Basic Statistics (3),
OR STAT 200 - Elementary Statistics (4)
- UHHS 460 - Introduction to Research in Health and Human Sciences (3),
OR PSYC 305 - Research Methods (3)

Total Hours for Emphasis 1. Family and Individual Development: 63-65**Special Requirements**

Prior to enrolling in HDFS 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, human development and family sciences, marriage and family therapy, and related fields.

Requirements in School (52-55)

- *HDFS 180 - Personal Development and the Family (3)
- *HDFS 207 - The Consumer (3),
OR *NUTR 201 - Human Nutrition (3)
OR NUTR 405 - Child Health and Nutrition (3),
OR PHHE 406 - Dimensions of Human Sexuality (3),
- *HDFS 230 - Child Development (3)
OR *EPS 307 - Development of the Adolescent (3)
- *HDFS 280 - Human Development, the Family, and Society (3)
- HDFS 284 - Introduction to Family Relationships (3)
- HDFS 343 - Family Financial Planning (3)
- HDFS 382 - Group Process and Personal and Family Functioning (3)
- HDFS 383 - Clinical Applications in Family Social Services (3)
- ^HDFS 445 - Management of Human and Family Resources (3)
- HDFS 477 - Domestic Violence and Trauma in the Family (3)
- HDFS 481 - Professional Practices in Family Social Services (3)
- HDFS 484 - Family Theories (3)
- HDFS 491 - Internship: Family Social Services (7)

Select one of the following areas of study:

Child Welfare Services (9)

- HDFS 478 - Child Welfare Foundations (3)
- HDFS 482 - Child Abuse and Neglect (3)
- *HDFS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3)

Prevention and Intervention within Family (12)

- HDFS 438 - Parent Education (3)
- HDFS 485 - Methodology in Family Life Education (3)
- *HDFS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3),
OR *HDFS 384 - Asian American Families (3)
- One of the following (3)
- HDFS 482 - Child Abuse and Neglect (3)
- HDFS 483 - Social Policy, Children and Families (3)
- HDFS 486 - Aging and the Family (3)
- HDFS 487 - Overview of Marriage and Family Therapy (3)
- PSYC 316 - Introduction to Psychopathology (3)

Leadership and Policy Studies (12)

- HDFS 483 - Social Policy, Children and Families (3)
- *HDFS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3),
OR *HDFS 384 - Asian American Families (3)
- HSCI 450 - Administration for Professional in Health and Human Sciences (3),
OR HSCI 455 - Management of Financial Resources in Health and Human Sciences Organizations (3),
OR POLS 326 - Nonprofit Management (3),
OR POLS 330 - Bureaucracy and the Public Policy Process (3)
- One of the following (3)
- HDFS 438 - Parent Education (3)
- HDFS 482 - Child Abuse and Neglect (3)
- HDFS 485 - Methodology in Family Life Education (3)
- HDFS 486 - Aging and the Family (3)
- PSYC 316 - Introduction to Psychopathology (3)

Requirements outside the School (15-17)

- One of the following (3-4)
- ^ENGL 350 - Writing Across the Curriculum (3)
- HSCI 350 - Critical Thinking for Health and Human Services Professionals (3)
- *MATH 155 - Trigonometry and Elementary Functions (3)
- *MATH 210 - Finite Mathematics (3)
- *MATH 211 - Calculus for Business and Social Science (4)
- *MATH 229 - Calculus I (4)
- *PHIL 105 - Logic and Critical Reasoning (3)
- PSYC 305 - Research Methods (3)
- *PSYC 102 - Introduction to Psychology (3)
- *SOCI 170 - Introduction to Sociology (3)
- *SOCI 260 - Introduction to Social Psychology (3),
OR PSYC 372 - Social Psychology (3)
- *STAT 100 - Basic Statistics (3),
OR STAT 200 - Elementary Statistics (4)

Total Hours for Emphasis 2. Family Social Services: 67-69**Special Requirements**

Students must be admitted to the emphasis before enrolling in HDFS 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 HDFS 383 and the balance completed prior to enrolling in HDFS 491. Prior to registering for HDFS 491, 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 HDFS 180 is a prerequisite for enrolling in HDFS 382, a grade of C or better in HDFS 382 is a prerequisite for enrollment in HDFS 383. Prerequisites for enrollment in the internship HDFS 491 are an overall GPA of at least 2.20 in NIU course work at the time of application for the internship, completion of HDFS 180, HDFS 382, HDFS 383, and HDFS 481 with a grade of C or better, 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

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

and summer terms. In the semester prior to enrollment in HDFS 491, students are required to attend monthly meetings. Students must complete HDFS 491 with a grade of C or better.

To qualify for the Family Social Services (FSS) and the Certified Family Life Education internship, students must pass a criminal background check that is conducted through the College of Health and Human Sciences. However, students are responsible for the cost of this background check. Background check must be completed by November 15 for spring internships and April 15 for summer internships. Students are also requested to read the information supplied on each link on the following web page www.chhs.niu.edu/about/cbc.shtml to know more about the process.

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 HDFS 491 with a grade of C or better, the student will receive a total of 9 semester hours credit for: HDFS 488, HDFS 491 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 and Consumer 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: HDFS 434, HDFS 438, HDFS 445, and HDFS 483. The Child Development Emphasis is recommended as preparation for advanced degrees in child development, human development and family sciences, and related fields.

Requirements in School (60)

- *HDFS 230 - Child Development (3)
- HDFS 231 - An Observational Approach to the Study and Assessment of Young Children (3)
- *HDFS 280 - Human Development, the Family, and Society (3)
- HDFS 284 - Introduction to Family Relationships (3)
- HDFS 330 - Principles of Guiding Young Children (3)
- HDFS 331 - Inclusive Program Planning for Infants, Toddlers, and Their Parents (3)
- HDFS 332 - Inclusive Program Planning for Children 3-8 Years of Age and Their Parents (3)
- *HDFS 384 - Asian American Families (3),
OR *HDFS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3)
- HDFS 399 - Orientation in Child Development Laboratory (3)
- ^HDFS 432 - Theories of Child Development (3)
- HDFS 482 - Child Abuse and Neglect (3)
- HDFS 490 - Practicum in Infant and Child Development Laboratories (12)

One of the following areas of study (9-18)

Parent/Infant Specialist (9)

- HDFS 434 - Administration and Supervision of Quality Programs for Young Children from Diverse Backgrounds (3),
OR HDFS 438 - Parent Education (3),
OR HDFS 440 - Therapeutic Play (3)
- HDFS 437 - Parent-Child Interaction From Birth to 8 Years (3)
- HDFS 439 - Infant Development in the Family: Typical and Atypical (3)

Child Life Specialist (18)

- HDFS 433 - Introduction to Child Life Theory and Practice (3)
- HDFS 440 - Therapeutic Play (3)
- HSCI 460 - Introduction to Research in Health and Human Sciences (3)
- PHHE 410 - Coping with Death, Dying, and Loss (3)
- Two of the following (6)
 - *EPS 307 - Development of the Adolescent (3)
 - HDFS 393 - Cooperative Education II for Child Development (3)
 - HDFS 439 - Infant Development in the Family: Typical and Atypical (3)
 - HSCI 318 - Medical Terminology (3)
 - NUTR 405 - Child Health and Nutrition (3)

Leadership Studies (9)

- *HDFS 384 - Asian American Families (3),
OR HDFS 483 - Social Policy, Children and Families (3),
OR *HDFS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3),
OR NUTR 405 - Child Health and Nutrition (3)
- HDFS 434 - Administration and Supervision of Quality Programs for Young Children from Diverse Backgrounds (3)
- ^HDFS 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 100 - Basic Statistics (3)
- One of the following (3-4)
 - ^ENGL 350 - Writing Across the Curriculum (3)
 - HSCI 350 - Critical Thinking for Health and Human Services Professionals (3)
 - *MATH 155 - Trigonometry and Elementary Functions (3)
 - *MATH 201 - Foundations of Elementary School Mathematics (3)
 - *MATH 210 - Finite Mathematics (3)
 - *MATH 211 - Calculus for Business and Social Science (4)
 - *MATH 229 - Calculus I (4)
 - *PHIL 105 - Logic and Critical Reasoning (3)
 - PSYC 305 - Research Methods (3)

Total Hours of Emphasis 3, Child Development: 66-67

Special Requirements

Students must earn a grade of C or better in HDFS 230 or EPS 304 or PSYC 324 in order to enroll in HDFS 330, HDFS 331, and HDFS 332. Students are required to attend mandatory meetings every fall and spring semester prior to enrollment in HDFS 490.

At the time of enrolling in HDFS 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 HDFS 490);

completion of HDFS 230 and HDFS 330 with a grade of C or better, HDFS 331 and HDFS 332 with a grade of C or better, and HDFS 432 and HDFS 498;

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

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 HDFS 490 with a grade of C or better. Students electing the study area of parent/infant or child life specialist must have taken HDFS 439 or be concurrently enrolled in it when taking HDFS 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 Fashion 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 (39-43)

FSMD 152 - Textiles (3)
 FSMD 258 - Introduction to the Fashion Industry (3)
 *FSMD 262 - Design Trends in Western Costume (3)
 FSMD 272 - Merchandising Promotion (3)
 ^FSMD 347 - Professional Development for Apparel Fashion Merchandising (3)
 FSMD 353 - Apparel Products Analysis (3)
 FSMD 355 - Merchandising Mathematics (3)
 FSMD 458 - Omni-Channel Fashion Retailing (3)
 ^FSMD 466 - Economics of Apparel and Textile Industries (3)
 FSMD 468 - Consumer Behavior Related to Apparel (3)
 FSMD 474 - Fashion Merchandising Internship (7),
 OR FSMD 356E - Cooperative Education II: Fashion Merchandising (3)
 Two of the following (6)
 FACS 450¹ - Workshop in Family, Consumer, and Nutrition Sciences (3)
 FSMD 369 - Fashion Design and Illustration (3)
 FSMD 456 - Apparel Product Development (3)
 *^FSMD 464 - Social Psychology of Dress and Appearance (3)
 FSMD 469 - Computer-Aided Fashion Design (3)
 FSMD 471 - Advanced Buying and Sourcing in the Fashion Industry (3)
 FSMD 472 - Fashion Forecasting (3)

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)

* Available for general education credit.

¹ When topic is related to fashion merchandising.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

*MATH 210 - Finite Mathematics (3),
 OR *MATH 211 - Calculus for Business and Social Science (4),
 OR *MATH 229 - Calculus I (4)
 MGMT 333 - Principles of Management (3)
 MKTG 295 - Principles of Marketing (3)
 *PSYC 102 - Introduction to Psychology (3)
 *SOCI 170 - Introduction to Sociology (3)
 *STAT 100 - Basic Statistics (3),
 OR UBUS 223 - Introduction to Business Statistics (3)
 One of the following (3)
 FSMD 365X - Principles of Retailing (3),
 OR MKTG 365 - Principles of Retailing (3)
 FINA 320 - Principles of Finance (3)
 MKTG 350 - Principles of Selling (3)
 MKTG 370 - Principles of Digital Marketing (3)
 MKTG 425 - Services Marketing (3)
 MKTG 448 - Integrated Marketing Communications (3)
 MKTG 464 - Product Planning and Development (3)

Total Hours for a Major in Fashion Merchandising: 73-78

Special Requirements

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

B. S. in Fashion Merchandising Degree Completion Program

This program is designed to facilitate completion of the B. S. in Fashion 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 Fashion 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 Fashion Merchandising major coursework: FSMD 152, FSMD 258, FSMD 262, FSMD 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.

Major in Hospitality and Tourism Management (B.S.)

The mission of the Hospitality and Tourism Management major is to prepare graduates with the foundational knowledge, demonstrated skills, and professional attitudes required in the field of Hospitality and Tourism Management. Graduates from this program are prepared for entry-level management positions and advanced study in hospitality and tourism management.

It is highly recommended that students see their advisers to plan their sequence of courses.

Special Requirements

Students must obtain ServSafe Food Protection Manager Certification, certification in first aid, cardiac pulmonary resuscitation (CPR), and verification of two-step tuberculin (TB) test. These requirements must be completed prior to enrolling in HOSP 320. Students must earn a grade of C or better in FACS

prerequisite courses before they can enroll in any successive FACS course to meet the requirements for the hospitality and tourism management major.

Liability insurance for internships is provided through a course fee.

Requirements in School (55-57)

HOSP 202 - Introduction to the Hospitality Industry (3)
 HOSP 301 - Career Planning in the Hospitality Industry (2)
 HOSP 316 - Hospitality Service (3)
 HOSP 319 - Foundations of Tourism (3)
 HOSP 320 - Quantity Food Production (4)
 HOSP 418 - Managing Human Resources in the Hospitality Industry (3)
 HOSP 425 - Hospitality Management (3)
 ^HOSP 426 - Strategic Management in the Hospitality Industry (3)
 HOSP 430 - Data Analysis for the Hospitality Industry (3)
 *HOSP 491 - Leadership Seminar in Hospitality and Tourism (2)
 HOSP 492 - Distinguished Speaker Series (1-2)
 HOSP 495 - Internship in Hospitality Management (8)
 Select three of the following (8-9) in consultation with adviser:
 HOSP 206 - Culinary Fundamentals (2)
 HOSP 303 - Hospitality Law (3)
 HOSP 315 - Casino and Gaming Management (3)
 HOSP 427 - Catering Operations Practicum (3)
 MKTG 325 - Buyer Behavior (3)
 MKTG 350 - Principles of Selling (3)
 MKTG 425 - Services Marketing (3)
 NUTR 424 - Cultural and National Food Patterns (3)
 OMIS 338 - Principles of Operations Management (3)

Select one of the following areas of study:

Hotel Management (9)

HOSP 302 - Lodging Operations (3)
 HOSP 314 - Hospitality Facility Management (3)
 HOSP 411 - Yield Management in the Hospitality Industry (3)

Restaurant, Meeting, and Event Management (9)

HOSP 304 - Food and Beverage Operations (3)
 HOSP 413 - Meeting, Event, and Convention Management (3)
 HOSP 417 - Trade Show and Exhibition Management (3)

Requirements outside School (29)

ACCY 206 - Introductory Financial Accounting (3),
 OR ACCY 288 - Fundamentals of Accounting (3)
 *ECON 260 - Principles of Microeconomics (3)
 *MATH 210 - Finite Mathematics (3),
 OR *MATH 211 - Calculus for Business and Social Science (4)
 MGMT 217 - Legal Environment of Business (3)
 MGMT 333 - Principles of Management (3)
 MKTG 295 - Principles of Marketing (3)
 MKTG 425 - Services Marketing (3)
 *PSYC 102 - Introduction to Psychology (3)
 STAT 200 - Elementary Statistics (4),
 OR *STAT 100 - Basic Statistics (3),
 OR UBUS 223 - Introduction to Business Statistics (3)

Total Hours for a Major in Hospitality and Tourism Management: 76-79

B. S. Degree Completion Program in Hospitality and Tourism Management

The focus of this program is baccalaureate-level education for Hospitality and Tourism 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 (A.A.S.).

Students interested in the B.S. degree completion program in Hospitality and Tourism Management should contact a program adviser for a preadmission interview and course counseling session. Upon completion of the preadmission interview and admission to NIU, proficiency credit may be awarded for HOSP 202, HOSP 302, HOSP 303, HOSP 304, HOSP 316, HOSP 319, HOSP 320, HOSP 413, HOSP 418, and HOSP 425. These proficiency credits will be held in escrow and be awarded during the last semester prior to degree completion..

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.

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 and Consumer Sciences.

General Minor (18)

*BIOS 103 - General Biology (3),
 OR *BIOS 109 - Human Biology (3)
 FSMD 258 - Introduction to the Fashion Industry (3)
 *HDFS 207 - The Consumer (3)
 *HDFS 280 - Human Development, the Family, and Society (3)
 *NUTR 201 - Human Nutrition (3),
 OR NUTR 405 - Child Health and Nutrition (3)
 *PSYC 102 - Introduction to Psychology (3)

Minor in Family and Child Studies (21)

*HDFS 230 - Child Development (3),
 *HDFS 280 - Human Development, the Family, and Society (3)
 HDFS 284 - Introduction to Family Relationships (3)
 HDFS 343 - Family Financial Planning (3)
 *PSYC 102 - Introduction to Psychology (3)
 Two of the following, including at least one upper-division course (6)
 HDFS 207 - The Consumer (3)
 #HDFS 384 - Asian American Families (3)
 HDFS 437 - Parent-Child Interaction From Birth to 8 Years (3)
 HDFS 438 - Parent Education (3)
 HDFS 482 - Child Abuse and Neglect (3)
 HDFS 483 - Social Policy, Children and Families (3)
 HDFS 486 - Aging and the Family (3)
 HDFS 487 - Overview of Marriage and Family Therapy (3)
 #HDFS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3)
 HDFS 489 - Topical Issues in Human Development and Family Sciences (3)

Minor in Fashion 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)
 FSMD 152 - Textiles (3)
 FSMD 258 - Introduction to the Fashion Industry (3)
 FSMD 353 - Apparel Products Analysis (3)
 One additional course is required from the upper-level courses in fashion merchandising (3)

Six or more semester hours in fashion merchandising course work for the minor must be taken at NIU.

Minor in Gerontology (18-19)

The gerontology program is an interdisciplinary program that fosters educational, research, and service activities pertinent to aging. The program offers an interdisciplinary undergraduate

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

¹ Required for DPD verification.

minor and an interdisciplinary certificate of undergraduate study. The gerontology minor and certificate allow students to integrate current knowledge and research on adulthood and aging into their degree programs. FACS majors are eligible to pursue the gerontology minor.

Requirements (18-19)

A degree-program student must apply to the gerontology program. Students must complete a minimum of 18 semester hours from the primary content area. Credit hours applied to satisfy the requirements for a major may not be counted again as satisfying the requirements for this minor.

Primary Content Area (15-16)

GERO 365 - Overview of Gerontology (3)
 HSCI 310 - Introduction to Health and Human Sciences (3)
 Three of the following (9-10)
 GERO 366 - Health Aspects of Aging (3)
 GERO 369 - Dementia Studies (3)
 GERO 466¹ - Topics in Gerontology (3)
 GERO 467² - Fieldwork in Gerontology (3)
 AND GERO 467A - Pre-Practicum Seminar (1)
 GERO 468 - Leadership in Aging Services (3)
 HDFS 465 - Theories and Issues in Aging Studies (3)

Choose from Other Courses Related to Gerontology (3)

*BIOS 109 - Human Biology (3)
 *HDFS 280 - Human Development, the Family, and Society (3),
 OR PSYC 225 - Lifespan Development: Childhood Through
 Adulthood (3)
 HDFS 486 - Aging and the Family (3)
 *KNPE 463 - Exercise and Physical Activity across the Lifespan (3)
 NUTR 201 - Human Nutrition (3)
 NUTR 428 - Nutrition and Aging (3)
 PHHE 410 - Coping with Death, Dying, and Loss (3)
 PHHE 433 - Principles of Long-Term Care Administration (3)
 PSYC 425 - Adult Development and Aging (3)
 SOCI 356 - Health, Aging, and Society (3)
 UHHS 301¹ - Independent Study in Health and Human Sciences (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 ExcelRate Illinois for highest quality recognition among early learning providers. 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)

HDFS 434 - Administration and Supervision of Quality Programs for Young Children from Diverse Backgrounds (3)
 HDFS 438 - Parent Education (3)
 ^HDFS 445 - Management of Human and Family Resources (3)
 HDFS 483 - Social Policy, Children and Families (3)
 HDFS 493 - Internship in Child Development (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 ExcelRate Illinois for highest quality recognition among early learning providers. 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)

HDFS 331 - Inclusive Program Planning for Infants, Toddlers and Their Parents (3)
 HDFS 393 - Cooperative Education II for Child Development (3)
 HDFS 437 - Parent-Child Interaction from Birth to 8 Years (3)
 HDFS 439 - Infant Development in the Family: Typical and Atypical (3)

Leadership in Aging Services (15)

To prepare students for leadership positions within the senior housing and health care industry, including long-term care administration. These courses cover content related to laws and regulations pertaining to long-term care, the aging process, and administrative and financial aspects of operation. For students with a bachelor's degree, satisfactory completion of this certificate meets course work requirements for an Illinois license in Nursing Home Administration and to sit for the licensing examination. FACS majors are eligible to pursue the Leadership in Aging Services Certificate.

Core Courses

ACCY 206 - Introductory Financial Accounting (3)
 OR ACCY 288 - Fundamentals of Accounting (3)
 GERO 365 - Overview of Gerontology (3)
 GERO 468 - Leadership in Aging Services (3)
 PHHE 433 - Principles of Long-Term Care Administration (3)
 PHHE 453 - Financial Management of Health Care Organizations (3)

Course List

General (FACS)

198. ORIENTATION IN FAMILY AND CONSUMER 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.

450. WORKSHOP IN FAMILY AND CONSUMER SCIENCES (1-3). Advanced studies of various areas in family and consumer 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 AND CONSUMER 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.

* Available for general education credit.

^ This is a Writing Infused Course.

¹ May be repeated to a maximum of 6 semester hours if topic changes.

² May be repeated to a maximum of 6 semester hours.

498. PROFESSIONAL SEMINAR IN FAMILY AND CONSUMER SCIENCES (1-3). Professional career development, opportunities for employment, organization affiliations, and legislation as it affects the programs in family and consumer sciences. PRQ: At least junior standing in School of Family and Consumer Sciences.

Fashion Merchandising (FSMD)

152. TEXTILES (3). Study of basic textile fibers, yarns, fabric construction and finishes; their origin, processing, and properties. Emphasis on textile terminology, selection, and care. PRQ: FSMD 152 with a grade of C or better and FSMD 258 with a grade of C or better.

252. APPAREL PRODUCTION (3). Fundamentals of mechanics of apparel production including raw material analysis, cutting production analysis, and assembly and finishing processes. PRQ: FSMD 152 with a grade of C or better and FSMD 258 with a grade of C or better.

256. COOPERATIVE EDUCATION I FOR FASHION MERCHANDISING (1-3). Cooperative work experience for students in fashion merchandising. Participation and work site must be approved by the school and the cooperative education program coordinator. S/U grading. PRQ: Declared fashion merchandising major.

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 styles in western dress from ancient Egypt, Greece, and Rome through the 20th century. Examination of factors that impacted stylistic trends within and across eras, as well as sources of new styles and how they diffused within populations.

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 FASHION MERCHANDISING I (3-30). Approved introductory learning experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with FSMD 389 Experiences in Fashion Merchandising II, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of school.

347. PROFESSIONAL DEVELOPMENT FOR FASHION MERCHANDISING (3). Exploration of topics in preparation for employment in the fashion industry, including career opportunities in fashion merchandising, job search strategies and skills, and self-assessment as a step toward successful career planning. Ethical issues pertaining to the fashion industry. Development of workplace skills and examination of customer service and leadership philosophies. PRQ: FSMD 152 with a grade of C or better and FSMD 258 with a grade of C or better, and declared fashion merchandising major.

351. ADVANCED TEXTILES (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, FSMD 152 with a grade of C or better, and FSMD 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: FSMD 152 with a grade of C or better, FSMD 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: FSMD 252 or consent of school.

355. MERCHANDISING MATHEMATICS (3). Application of mathematical concepts and calculations in fashion merchandising. PRQ: FSMD 152 with a grade of C or better and FSMD 258 with a grade of C or better; and MATH 210 or MATH 211 or MATH 229.

356. COOPERATIVE EDUCATION II FOR FASHION MERCHANDISING (1-3). Advanced cooperative work experience for students in fashion merchandising. 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. PRQ: FSMD 347, an overall GPA of 2.00 or above, and declared fashion merchandising major.

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 295.

367. COMPUTER APPLICATIONS FOR FASHION MERCHANDISING (3). Exploration of computers and software applications used in fashion merchandising. Emphasis on how computer technology impacts the fashion merchandising industry. PRQ: FSMD 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, FSMD 262, and FSMD 353, or consent of school.

389. EXPERIENCES IN FASHION MERCHANDISING II (3-30). Approved advanced learning experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with FSMD 289, Experiences in Fashion 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: FSMD 152 with a grade of C or better, FSMD 252, and FSMD 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, FSMD 152 with a grade of C or better, FSMD 258 with a grade of C or better, and FSMD 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: FSMD 152 with a grade of C or better, FSMD 252, and FSMD 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: FSMD 353 or consent of school.

458. OMNI-CHANNEL FASHION RETAILING (3). In-depth examination of multiple channels of fashion retailing comparing traditional brick-and-mortar stores, e-tailing, and social media. Emphasis on the enhancement of consumers' online shopping experiences and the engagement of consumers in an online retail environment. PRQ: FSMD 152 with a C or better and FSMD 258 with a 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: FSMD 152 with a grade of C or better, FSMD 258 with a grade of C or better, FSMD 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 FSMD 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: FSMD 152 with a grade of C or better, FSMD 258 with a grade of C or better, PSYC 102, SOCI 170, STAT 100 or UBUS 223, 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: FSMD 152 with a grade of C or better, and FSMD 258 with a grade of C or better, or consent of school.

470. **FASHION MERCHANDISING (3).** Functions and practices of retail fashion store management and organization. Observation of the operation of stores. PRQ: FSMD 353, MATH 210 or MATH 211 or MATH 229, and MKTG 295.

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: FSMD 355 and MKTG 295 and MGMT 333.

472. **FASHION FORECASTING (3).** Researching sociocultural change from diverse perspectives impacting future fashion trends. Integration and application of trend research, fashion theory, textile and apparel product knowledge, and consumer behavior in formulating a fashion forecast. Use of visual, oral, and written communication in delivering the forecast message. PRQ: FSMD 152 with a grade of C or better, FSMD 258 with a grade of C or better, FSMD 262, and at least junior standing.

474. **FASHION 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: FACS GPA of 3.00 or above, FSMD 347, and at least a junior standing and consent of school.

Human Development and Family Sciences (HDFS)

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.

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

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: HDFS 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: HDFS 284.

293. **COOPERATIVE EDUCATION I FOR CHILD DEVELOPMENT (1-3).** Cooperative work experience for students in the child development emphasis in family and consumer sciences. Participation and work site must be approved by the school and the cooperative education program coordinator. S/U grading. PRQ: Declared child development or pre-major.

294. **COOPERATIVE EDUCATION I FOR FAMILY SOCIAL SERVICES (1-3).** Cooperative work experience for students in the family social services emphasis in family and consumer sciences. Participation and work site must be approved by the school and the cooperative education program coordinator. S/U grading. PRQ: Declared family social services or pre-major.

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 and family center and through other media. Cannot be taken concurrently with HDFS 331. PRQ: HDFS 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: HDFS 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 HDFS 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: HDFS 230 or EPS 304 or PSYC 324 with a grade of C or better.

343. **FAMILY FINANCIAL PLANNING (3).** Principles of management as related to family finances. PRQ: STAT 100.

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: HDFS 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: HDFS 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: HDFS 284 or SOCI 170.

393. COOPERATIVE EDUCATION II FOR CHILD DEVELOPMENT (1-3). Advanced cooperative work experience for students in the child development emphasis in family and consumer sciences. Participation and work site must be approved by the school and the cooperative education program coordinator. S/U grading. May be repeated to a maximum of 6 semester hours. PRQ: HDFS 293 or equivalent, declared child development major, and consent of school.

394. COOPERATIVE EDUCATION II FOR FAMILY SOCIAL SERVICES (1-3). Advanced cooperative work experience for students in the family social services emphasis in family and consumer sciences. Participation and work site must be approved by the school and the cooperative education program coordinator. S/U grading. May be repeated to a maximum of 6 semester hours. PRQ: HDFS 294 or equivalent, declared family social services major, and consent of school.

398. COOPERATIVE EDUCATION FOR FAMILY AND INDIVIDUAL DEVELOPMENT (3). Advanced cooperative work experience for students in the family and individual development emphasis in family and consumer 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 Human Development and Family Sciences majors in the Family and Individual Development emphasis with senior standing. PRQ: A grade of C or better in HDFS 280 or PSYC 225; and a grade of C or better in HDFS 284; and declared family and individual development major, senior standing; and at least two of the following: HDFS 437, HDFS 438, HDFS 482, HDFS 483, HDFS 488; and consent of school.

399. ORIENTATION IN CHILD DEVELOPMENT LABORATORY (3). A prepracticum seminar, which focuses on preparation of pre-service professionals in early childhood settings. Familiarity with health and safety regulatory guidelines within childcare as defined by the Illinois Department of Children and Family Services licensing regulations. Professional issues and conduct are reviewed as defined by the National Association for the Education of Young Children standards and criteria. Includes CPR and First Aid training requirements. PRQ: HDFS 230 or EPS 304 or PSYC 324.

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.

432. THEORIES OF CHILD DEVELOPMENT (3). Analysis of the major theories of child development and their implications in working with young children. PRQ: HDFS or ECS major; at least junior standing; and a grade of C or better in the following: HDFS 230 or EPS 304 or PSYC 324; and HDFS 280 or PSYC 225.

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: HDFS 230 or EPS 304 or PSYC 324, and HDFS 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: HDFS 230 or EPS 304 or PSYC 324, and HDFS 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: HDFS 284; and one of the following: HDFS 230 or HDFS 280 or EPS 304 or PSYC 225 or PSYC 324.

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: HDFS 284, at least junior standing, and HDFS 230 or PSYC 324 or EPS 304.

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: HDFS 230 or EPS 304 or PSYC 324 and HDFS 284.

440. THERAPEUTIC PLAY (3). The meaning of play will be explored across cultures and contexts. Exploration of play theories, principles of play therapy, and various play modalities for the clinical setting. The functions of play therapy will be covered including: developmentally supportive play, normalization of atypical experiences, and supporting parent-child relationships. PRQ: HDFS 230, HDFS 231, and either HDFS 331 or HDFS 332.

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: HDFS major; at least junior standing; and a grade of C or better in the following: HDFS 180 or HDFS 280 or PSYC 225, and HDFS 284.

465. THEORIES AND ISSUES IN AGING STUDIES (3). Advanced interdisciplinary examination of aging and the older adult population. Includes physiological, psychosocial, health, health promotion, and theoretical aspects of aging. PRQ: GERO 365 or consent of program.

477. DOMESTIC VIOLENCE AND TRAUMA IN THE FAMILY (3). Overview of violence and maltreatment in intimate relationships across the lifespan including the impact on the family, and consequences for children and their future relationships. The history and societal response to violence and maltreatment in intimate relationships. PRQ: HDFS 230 or HDFS 280; and HDFS 284.

478. CHILD WELFARE FOUNDATIONS (3). An introduction to child welfare policies and practices in the State of Illinois and the United States. Focuses on the nature and impact of child maltreatment, the ways in which society prevents or responds to the social problem of child maltreatment, and how the child welfare system in Illinois responds to child maltreatment through a life of case lens to ensure safety, permanency, and wellbeing of children and youth in care. PRQ: HDFS 230 or HDFS 280; and HDFS 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: HDFS major and HDFS 180 and HDFS 280 and HDFS 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: HDFS 284; and HDFS 230 or HDFS 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: HDFS 284; and HDFS 230 or HDFS 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: HDFS major; at least junior standing; and a grade of C or better in the following: HDFS 280 or PSYC 225, and HDFS 284.

485. **METHODOLOGY IN FAMILY LIFE EDUCATION (3).** Provides training in Family Life Educator methodology for aspiring family life educators. Introduction to the history of the profession and practice of family life education, instruction on how to effectively develop, implement, and evaluate family life education programs in a variety of community settings. PRQ: Family and Consumer Sciences major, a grade of C or better in HDFS 180 and HDFS 284, a grade of C or better in HDFS 280 or PSYC 225, and senior 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: HDFS 280 or PSYC 225, and HDFS 284, or consent of school.

487. **OVERVIEW OF MARRIAGE AND FAMILY THERAPY (3).** Introduction to the clinical work of marriage and family therapists with individuals, couples, and families. Includes an overview of the primary clinical theories of marriage and family therapy to facilitate an understanding of family and other relationships from a systems perspective. Provides a strong foundation for students considering a career as a professional therapist. PRQ: At least junior standing.

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: HDFS 284 and one of the following: HDFS 230, or HDFS 280/PSYC 225, and at least junior standing.

489. **TOPICAL ISSUES IN HUMAN DEVELOPMENT AND FAMILY SCIENCES (3).** Selected topics affecting child development and family life. May be repeated to a maximum of 6 semester hours when topic changes. PRQ: HDFS 284; and one of the following: HDFS 230 or HDFS 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 HDFS 393 and HDFS 490 may be applied toward graduation. PRQ: HDFS 498 and see emphasis 3, child development, special requirements.

491. **INTERNSHIP IN FAMILY SOCIAL SERVICES (7-12).** Supervised participation in professional settings. Students will be assigned to experiences appropriate to their professional interest in family social services. When taken in conjunction with HDFS 394, Cooperative Education II for Family Social Services, total enrolled credit hours in both courses may not exceed 12 hours. S/U grading basis may be used. See special requirements as may apply to internships according to major. PRQ: Consent of school.

493. **INTERNSHIP IN CHILD DEVELOPMENT (1-3).** Supervised participation in professional early childhood and/or other related settings. Students will be assigned to experiences appropriate to their professional interest in child development. May be repeated to a maximum of 3 semester hours. S/U grading basis may be used. PRQ: HDFS 330, HDFS 331, HDFS 332 and HDFS 490.

Hospitality Management and Tourism (HOSP)

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.

206. **CULINARY FUNDAMENTALS (2).** The theories and practice of food preparation in a quantity production kitchen. Focus on culinary fundamentals, equipment operation, sanitation, and product quality control. Application of communication skills, time management skills and problem-solving strategies in a fast-paced work environment.

296. **COOPERATIVE EDUCATION I FOR HOSPITALITY MANAGEMENT (1-3).** Cooperative work experience for students in the hospitality management emphasis in family and consumer sciences. Participation and work site must be approved by the school and the cooperative education program coordinator. S/U grading. PRQ: Declared hospitality management major.

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 HOSP 399, Experiences in Hospitality Management II, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of school.

301. **CAREER PLANNING IN THE HOSPITALITY INDUSTRY (2).** A comprehensive approach to career planning in the hospitality industry that incorporates self-awareness, career exploration, and self-marketing techniques for use in career decision making and development of job search skills. CRQ: HOSP 202.

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: HOSP 202 with a grade of C or better. CRQ: MKTG 295.

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 HOSP 202. CRQ: HOSP 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: HOSP 202.

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: HOSP 302. CRQ: MGMT 333.

315. **CASINO AND GAMING MANAGEMENT (3).** Emphasis on the structure and operating protocols for gaming, including onshore and offshore venues. Focus on internal/external auditing, gaming regulations, economic impact, e-commerce, financial control, and responsible gaming. PRQ: HOSP 202.

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: HOSP 202 and hospitality management major.

319. **FOUNDATIONS OF TOURISM (3).** Introduction to the principles, practices, and philosophies of tourism, with emphasis upon global impacts, delivery and development of products and services, tourist behavior, and economic aspects of the tourism industry. Examines travel and tourism from an interdisciplinary perspective. PRQ: Sophomore standing.

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: NUTR 200A with a grade of C or better and NUTR 200B with a grade of C or better, or HOSP 316 with a grade of C or better, ServSafe Food Protection Manager Certification, first aid and cardiac pulmonary resuscitation (CPR) certifications, 2-step tuberculin (TB) test, and verification of 60 hours work experience in food production.

396. COOPERATIVE EDUCATION II FOR HOSPITALITY MANAGEMENT (1-3). Advanced cooperative work experience for students in the hospitality management emphasis in family and consumer 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: HOSP 296 or equivalent, declared hospitality management major, and consent of school.

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 HOSP 299, Experiences in Hospitality Management I, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of school.

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: HOSP 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: HOSP 202 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: HOSP 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: HOSP 202 with a grade of C or better and MGMT 333.

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: HOSP 425 with a grade of C or better, and MGMT 333.

427. CATERING OPERATIONS PRACTICUM (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. PRQ: ServSafe Food Protection Manager Certification.

430. DATA ANALYSIS FOR THE HOSPITALITY INDUSTRY (3). Acquaint students with a variety of data, including the hotel industry performance reports and restaurant industry operations report, that can be turned into useful information for sound hospitality decision making. PRQ: HOSP 425; and MATH 210 or MATH 211.

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: HOSP 418.

492. DISTINGUISHED SPEAKER SERIES (1). Industry leaders representing the hospitality and tourism industries are invited to speak on their vision and the challenges that they face. May be repeated up 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. May be repeated up to a maximum of 15 semester hours. PRQ: HOSP 302 or HOSP 304; HOSP 316, and HOSP 301; with a grade of C or better in each course.

Family and Consumer Sciences Faculty

Thomas Pavkov, Ph.D., Northwestern University, professor, chair
Julie Boggess, MPA, Roosevelt University, interim director of gerontology

Susan P. Bowers, Ph.D., Ohio State University, associate professor

Kelly Champion, M.S., Northern Illinois University, instructor

Sarah L. Cosbey, Ph.D., Iowa State University, associate professor

Shi-Ruei Sherry Fang, Ph.D., Michigan State University, professor
Bryan Flower, M.S., Robert Morris University, Chicago, supportive professional staff

Kristina Hayward, M.S., Northern Illinois University, supportive professional staff

Nicholas Hryhorczuk, Ph.D., University of Illinois at Urbana-Champaign, assistant professor

Hyun-Mee Joung, Ph.D., Iowa State University, associate professor

J. Mark Killmer, Psy. D., Graduate Theological Foundation, clinical assistant 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

MaryAnn Lorenz, M.F.A., Academy of Art University, clinical assistant professor

Bette Montgomery, Ph.D., University of Wisconsin, associate professor

Eunha Myung, Ph.D., University of Nevada-Las Vegas, professor

Sherri Newman, B.S., Northern Illinois University, supportive professional staff

Jane Rose Njue, Ph.D., Iowa State University, associate professor
Ecila Scaife, B.S., Northern Illinois University, supportive professional staff

Lisa Schmidt, M.S., Northern Illinois University, CDFC practicum director

Kristin Schulz, M.S., Northern Illinois University, interim executive director of CDFC

Lin Shi, Ph.D., Texas Tech University, professor

D. Scott Sibley, Ph.D., Kansas State University, assistant professor

Floresia Flora Surjadi, Ph.D., Iowa State University, assistant professor

Melissa Walter, Ph.D., Iowa State, assistant professor

Charline Xie, Ph.D., University of Nebraska at Lincoln, professor

School of Health Studies (AHLS, HLTH, NUTR, PHHE)

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 Health Studies offers majors in medical laboratory sciences (B.S.); nutrition, dietetics, and wellness (B.S.); and public health (B.S.). In addition, the school offers minors in nutrition, health, and wellness; public health; and health education; 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 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.

A practicum is required for all students majoring in medical laboratory sciences and students pursuing the health and wellness area of study of the nutrition, dietetics and wellness program. An internship is required for all students majoring in public health. Students are advised that they are responsible for their own transportation to and from the practicum or internship facilities and all costs associated with these activities.

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 Health Studies, such a possibility exists in NUTR 295, NUTR 395, and NUTR 497. A statement of grounds for dismissal is available from the coordinator of each internship.

Medical Laboratory Sciences

General Information

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.

Students must be admitted into the medical laboratory sciences program to enroll in 300- and 400- level AHLS courses. Students must maintain a grade of C or better in all AHLS-designated courses in the MLS program, except for AHLS 476, or be subject to dismissal from the program. A student also may be dismissed from the program for unprofessional behavior or for actions that threaten the health and/or safety of patients. All general education courses must be completed before beginning the clinical courses in the hospital.

The medical laboratory science clinical practicum courses include topics in hematology, hemostasis, urinalysis, body fluids, medical microbiology, medical diagnostic biochemistry, medical

immunology and immunohematology. Clinical placements at affiliated hospitals require the student to provide and incur cost for the following:

- completion of a 3-dose series of Hepatitis B immunization if needed followed by Hepatitis B blood titer. 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;

- criminal background check;

- AMA cardiopulmonary resuscitation (CPR) certification;

- 10 panel drug screen;

- quantitative blood titers for Hepatitis B, Rubella, Rubeola, Mumps, Varicella zoster;

- Two-step TB skin test or Quantiferon Gold blood test;

- Tdap immunization;

- transportation and room/board for practicum courses.

Before enrolling in AHLS 486 and AHLS 487 students must have completed all other university and program requirements for graduation. Medical laboratory science degree completion (ADC) students enrolling in AHLS 488 must be in the process of completing all university requirements.

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 ASCP Board of Certification or equivalent national organization and a minimum of one year 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: AHLS 301, AHLS 302, AHLS 303, AHLS 308, AHLS 336, AHLS 344, HLTH 440 or AHLS 446, HSCI 318, HSCI 460; and satisfactory performance in AHLS 475. Upon enrolling in AHLS 488, Medical Laboratory Science Degree Completion Practicum, and AHLS 475, comprehensive exams, the student will receive 13 semester hours of credit for AHLS 211, AHLS 300, AHLS 311, AHLS 312, AHLS 313, AHLS 337, and AHLS 345. Upon successful completion of all the MLS requirements, the student may be awarded up to an additional 17 hours of proficiency credit for the learning experiences leading to the A.A.S. in CLT/MLT. Students in this program are exempt from the 30-semester-hour university graduation residence.

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 (47-59)

AHLS 211 - Introduction to the Medical Laboratory Sciences (3)
 AHLS 300 - Urinalysis (2)
 AHLS 301 - Medical Immunology (2)
 AHLS 302 - Hematology/Hemostasis (3)
 AHLS 303 - Immunohematology (2)
 AHLS 308 - Body Fluids (1)
 AHLS 311 - Medical Immunology Laboratory (1)
 AHLS 312 - Hematology/Hemostasis Laboratory (2)
 AHLS 313 - Immunohematology Laboratory (1)
 AHLS 336 - Medical Diagnostic Microbiology (3)
 AHLS 337 - Medical Diagnostic Microbiology Laboratory (2)
 AHLS 344 - Medical Diagnostic Biochemistry (4)
 AHLS 345 - Medical Diagnostic Biochemistry Laboratory (2)
 AHLS 440 - Introduction to Teaching in the Allied Health Professions (1)
 ^AHLS 446 - Principles of Laboratory Management and Practice (1),
 OR HSCI 450 - Administration for Professionals in Health and
 Human Sciences (3)
 AHLS 471 - Molecular Testing/Mycology/Parasitology/Special Topics (3)
 AHLS 475 - Medical Laboratory Sciences Competency (1)
 AHLS 476 - Special Topics and Comprehensive Exams (3)
 AHLS 486 - Medical Laboratory Science Practicum I (10), and
 AHLS 487 - Medical Laboratory Science Practicum II (10)
 OR AHLS 488-Medical Laboratory Science Degree
 Completion Practicum (10-15)¹

Requirements outside School (37-38)

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 310 - Introductory Organic and Biological Chemistry (3)
 CHEM 311 - Introductory Organic and Biological Chemistry
 Laboratory (1)
 HSCI 318 - Medical Terminology (3)
 ^HSCI 460 - Research in Health and Human Sciences (3)
 *STAT 100 - Basic Statistics (3)

Total Hours for a Major in Medical Laboratory Sciences: 84-97

Recommendations

MLS majors must maintain an ongoing active communication with the program director for medical laboratory sciences.

Graduates of the MLS program are encouraged to become certified as a medical laboratory scientist by sitting for the ASCP Board of Certification MLS exam for professional competence. Completion of the examination, however, is not a prerequisite for the B.S. degree. Graduates are encouraged to take the exam within six months of completion of the program.

Major in Nutrition, Dietetics, and Wellness (B.S.)

This program provides basic preparation for fulfillment of the baccalaureate requirements for careers in community nutrition programs, health and wellness, dietetics, as well as in other related areas. In addition, students are eligible for graduate studies in these areas.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Special Requirements

Students must obtain the ServSafe Food Protection Manager Certification and meet current Illinois Department of Public Health requirements for foodservice managers' sanitation certificate and certification in first aid, cardiac pulmonary resuscitation (CPR), and non-reactive 2-step tuberculin (TB) test. Students must earn a grade of C or better in NUTR prerequisite courses before they can enroll in any successive NUTR course to meet the requirements for a nutrition, dietetics, and wellness major. Liability insurance for internship courses is provided through a course fee.

The major GPA will be calculated using requirements inside and outside of the school.

Completion of the Dietetics area of study 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) and have a cumulative GPA of at least 2.75. In addition, these students must achieve a grade of B or better in the following DPD courses: NUTR 310, NUTR 415 and NUTR 416. DPD verification is a prerequisite to securing placement in an ACEND-accredited dietetic internship program. Students are also strongly recommended to acquire work experience in patient care and food service to enhance eligibility for the dietetic internship program.

Postbaccalaureate students

Postbaccalaureate students without degrees from an ACEND accredited nutrition degree program who wish to complete 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 (24)

NUTR 200A - Principles of Food Preparation (3)
 NUTR 200B - Food Preparation Laboratory (2)
 NUTR 201 - Human Nutrition (3)
 NUTR 309 - Science of Nutrition (3)
 NUTR 310 - Applied Nutrition through the Lifecycle (3)
 NUTR 409 - Nutrition Education for Health Promotion (3)
 NUTR 410 - Community Nutrition (3)
 NUTR 429 - Strategies for Modifying Nutrition Behaviors (3)
 HLTH 498 - Seminar in Health Studies (1)

Select one of the following areas of study:

Nutrition, Health, and Wellness (7-11)

NUTR 419 - Nutrition for Health Promotion and Chronic Disease
 Prevention (3)
 NUTR 497 - Internship in Nutrition, Health, and Wellness (3)
 One of the following
 CHEM 231 - Introductory Biological Chemistry Laboratory (1)
 HOSP 427 - Catering Operations Practicum (3)
 NUTR 306 - Nutrition in Relation to Health and Exercise (3)
 NUTR 404 - Nutrition and Community Food Systems (2-5)
 ^NUTR 406 - Global Food and Nutrition Issues (3)
 NUTR 424 - Cultural and National Food Patterns (3)
 NUTR 428 - Nutrition and Aging (3)

Dietetics with DPD

CHEM 231 - Introductory Organic Chemistry Laboratory (1)
 NUTR 415 - Medical Nutrition Therapy I (3)
 NUTR 416 - Medical Nutrition Therapy II (3)

Students who plan to pursue this area of study can enroll in courses for this area of study when they have completed the prerequisite courses with a GPA of 3.00 or higher. Retention and successful completion of the Didactic Program in Dietetics (DPD) is based on maintenance of a minimum major GPA of 3.00.

* Available for general education credit.

^ This is a Writing Infused Course.

¹ This option is for degree completion students only.

Requirements outside School (47-49)

*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 310 - Introductory Organic and Biological Chemistry (3),
 OR CHEM 330 - General Organic Chemistry I (3)
 *ECON 260 - Principles of Microeconomics (3)
 **EPFE 201 - Education as an Agent for Change (3),
 OR *EPS 300 - Educational Psychology (3)
 HOSP 320 - Quantity Food Production (4)
 HSCI 460 - Research Methods in Health & Human Sciences (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 100 - Basic Statistics (3),
 OR STAT 200 - Elementary Statistics (4)

**Total Hours for a Major in Nutrition, Dietetics and Wellness:
 78-84**

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. 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-Internship Seminar (1)
 PHHE 489 - Internship in Public Health (3-6)

Requirements outside School (20-23)

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)
 *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 350 - Writing Across the Curriculum (3)
 *MATH 110 - College Algebra (3)
 OR *MATH 210 - Finite Mathematics (3),
 OR *MATH 211 - Calculus for Business and Social Sciences (4),
 OR *MATH 229 - Calculus I (4)

*STAT 100 - Basic Statistics (3)
 OR STAT 200 - Elementary Statistics (4)
 OR UBUS 223 - Introduction to Business Statistics (4)

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.

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)
 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 (21-41)

*BIOS 109 - Human Biology (3),
 OR BIOS 357 - Human Anatomy and Physiology (5)
 *SOCI 170 - Introduction to Sociology (3),
 OR *SOCI 250 - Contemporary Social Institutions (3)

One of the following (3)
 GERO 365 - Overview of Gerontology (3)
 *HDFS 280 - Human Development, the Family and Society (3)
 PHHE 410 - Coping with Death, Dying, and Loss (3)
 *PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)

One of the following designations (12-30)
 A minor offered by the School of Family and Consumer Sciences, or a minor in biological sciences, chemistry, communication studies, communicative disorders, gerontology, environmental management systems, military science, nonprofit and NGO studies, environmental studies, Spanish, or psychology, or other course work as approved by the public health advisor.

Total Hours for Emphasis 1, General Public Health: 75-101

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)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

Requirements outside School (24-26)

ACCY 288 - Fundamentals of Accounting (3),
 OR ACCY 206 - Introductory Financial Accounting (3)
 *BIOS 109 - Human Biology (3),
 OR BIOS 357 - Human Anatomy and Physiology (5)
 *ECON 260 - Principles of Microeconomics (3)
 MGMT 333 - Principles of Management (3)
 MKTG 295 - Principles of Marketing (3)
 *PSYC 102 - Introduction to Psychology (3)
 *SOCI 170 - Introduction to Sociology (3),
 OR *SOCI 250 - Contemporary Social Institutions (3)
 One of the following (3)
 GERO 365 - Overview of Gerontology (3)
 *HDFS 280 - Human Development, the Family and Society (3)
 PHHE 410 - Death, Dying and Coping (3)
 *PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)

Total Hours for Emphasis 2, Health Administration: 84-92**Recommendations to meet the math requirement for emphasis 2**

*MATH 210 - Finite Mathematics (3),
 OR *MATH 211 - Calculus for Business and Social Sciences (3),
 OR *MATH 229 - Calculus I (4)

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 (28-31)

CHEM 310 - Introductory Organic and Biological Chemistry (3)
 AND CHEM 311 - Introductory Organic and Biological Chemistry Laboratory (1)
 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 - GIS for Public and Environmental 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)
 One course in science approved by the public health adviser (3-4)

Total Hours for Emphasis 3, Environment and Health: 82-92**Recommendations to meet the math requirements for emphasis 3**

*MATH 210 - Finite Mathematics (3),
 OR *MATH 211 - Calculus for Business and Social Sciences (3),
 OR *MATH 229 - Calculus I (4)

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 315 - Introduction to Health Promotion (3)
 PHHE 404 - Drugs in Society (3)
 OR PHHE 437 - Assessment, Treatment, and Prevention of Drug and Alcohol Addiction (3)
 PHHE 406 - Dimensions of Human Sexuality (3)
 PHHE 431 - Applied Health Promotion Programming (3)
 One of the following (3)
 ^PHHE 408 - Mental and Emotional Health (3)
 PHHE 410 - Coping with Death, Dying, and Loss (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 (12-14)

*BIOS 109 - Human Biology (3),
 OR BIOS 357 - Human Anatomy and Physiology (5)
 *NUTR 201 - Human Nutrition (3),
 OR ^NUTR 406 - Global and Nutrition Issues (3)
 *SOCI 170 - Introduction to Sociology (3),
 OR *SOCI 250 - Contemporary Social Institutions (3)
 One of the following (3)
 GERO 365 - Overview of Gerontology (3),
 *HDFS 280 - Human Development, the Family, and Society (3),
 *PSYC 225 - Lifespan Development: Childhood through Adulthood (3)

Total Hours for Emphasis 4, Health Promotion: 75-83**Accelerated B.S./M.P.H. Program in Public Health****Admission**

The five-year accelerated program leads to both the B.S. and M.P.H. degrees in Public Health. Students who want to complete this program must identify themselves to the Public Health program as undergraduate majors. Eligibility requirements for application to the B.S./M.P.H. program are:

Undergraduate majoring in Public Health

Completion of at least 92 semester hours of undergraduate designated course work as approved by adviser

Completion of approved course work for the B.S./M.P.H. program (see adviser)

Minimum GPA of 3.00; no GRE required

Completion of all application requirements, including transcripts, letters of recommendation, a statement of purpose, and a resume/curriculum vitae

Applications are due to the Graduate School no later than July 15 prior to the applicant's final undergraduate year, for fall semester matriculation into the program. Admission will be on a competitive basis, and the likelihood of admission will depend on the number

* Available for general education credit.

^ This is a Writing Infused Course.

and quality of the applicants to the program, the number and quality of applicants to the M.P.H. in general, as well as other factors normally considered in admissions decisions by the Graduate School and the Public Health program.

Interested students should talk to a public health adviser as early as possible.

Curriculum

Students must complete 92 semester hours of undergraduate designated course work as approved by adviser for the accelerated B.S. in Public Health to M.P.H. degree. Students accepted into the M.P.H. program will matriculate in the M.P.H. program in the fall of their final undergraduate year. The graduate-level courses taken in the B.S./M.P.H. are the same as those taken in the stand-alone M.P.H. program. Up to 18 semester hours of M.P.H. courses will be counted toward the 120 hours needed for the undergraduate degree. Students must complete all undergraduate requirements and receive their B.S. degree before the beginning of the fifth year. After completing one additional year of study in the M.P.H. program, students will receive their M.P.H. degree.

Students must complete all the admission requirements for the Public Health B.S. accelerated degree as well as all general education requirements by the end of their junior year and have earned at least 92 semester hours. Beginning with the first semester of their senior year, students will start taking classes in the M.P.H. program as well as completing final university requirements. Successful completion of year 4 courses will count towards the final 28 semester hours of the undergraduate degree.

Minor in Nutrition, Health, and Wellness (24-26)

Medical laboratory sciences and public health majors are eligible to complete this minor.

NUTR 200A - Principles of Food Preparation (3)

NUTR 200B - Food Preparation Laboratory (2)

* NUTR 201 - Human Nutrition (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)

Three of the following:

NUTR 306 - Nutrition in Relation to Health and Exercise (2)

AND KNPE 306 - Sports Nutrition (1)

OR NUTR 306 - Nutrition in Relation to Health and Exercise (3)

NUTR 308 - Current Problems and Trends in Nutrition and Foods (3)

NUTR 405 - Child Health and Nutrition (3)

NUTR 406 - Global Food and Nutrition Issues (3)

NUTR 424 - Cultural and National Food Patterns (3)

PHHE 295 - Introduction to Public Health (3)

Six or more semester hours in Nutrition, Health, and Wellness coursework must be completed at NIU.

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.

Medical laboratory sciences and nutrition, dietetics, and wellness 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)

HSCI 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)

Six or more semester hours in public health coursework must be completed at NIU.

Minor in Health Education (27)

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, and a grade of C or better in PHHE 220 prior to enrolling in 300-level professional health education courses.

Students should plan their programs of study in cooperation with faculty in health education.

Medical laboratory sciences, nutrition, dietetics, and wellness, and public health majors are eligible to complete this minor.

*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 315 - Introduction to Health Promotion (3)

PHHE 400 - Methods and Materials in Middle School and High School Health Education (3)

PHHE 404 - Drug Education (3)

^PHHE 406 - Sexuality Education (3)

^PHHE 408 - Mental and Emotional Health (3)

One of the following (3)

*NUTR 201 - Human Nutrition (3),

OR NUTR 405 - Child Health and Nutrition (3)

PHHE 302 - Colloquium in School Health Education (3)

PHHE 410 - Coping with Death, Dying, and Loss (3)

PHHE 412 - Consumer Health (3)

PHHE 472 - Current Issues: Health Education (1-3)

Six or more semester hours in the minor must be completed at NIU.

Course List

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.

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

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. PRQ: Medical laboratory sciences major.

301. MEDICAL IMMUNOLOGY (2). Theory and application of general immunology, genetics principles and investigative techniques to medical immunology as would be applied in the clinical laboratory. PRQ: Medical laboratory sciences major.

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. PRQ: Medical laboratory sciences major.

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. PRQ: Medical laboratory sciences major.

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. PRQ: Medical laboratory sciences major.

311. MEDICAL IMMUNOLOGY LABORATORY (1). Practical laboratory application of theory and analytical techniques related to the medical 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 (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. PRQ: BIOS 213 or BIOS 313; and medical laboratory sciences major.

337. MEDICAL DIAGNOSTIC MICROBIOLOGY LABORATORY (2). Practical laboratory application of theory and analytical techniques related to the clinical microbiology lectures. Includes manual procedures for the identification and assessment of pathogenic microorganisms in the clinical laboratory. Clinical specimens utilized in laboratory. CRQ: AHLS 336.

344. MEDICAL DIAGNOSTIC BIOCHEMISTRY (4). Clinical correlations of laboratory results and pathologic processes. Theory of analytical techniques and interpretation of data as applied to clinical conditions. PRQ: Medical laboratory sciences major.

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. CRQ: AHLS 344.

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.

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.

471. MOLECULAR TESTING/MYCOLOGY/PARASITOLOGY/SPECIAL TOPICS (3). Advanced lectures and practical assessments in medical laboratory sciences including molecular testing by faculty and invited guest speakers with expertise in specialty topics. Theory and application of general principles and laboratory techniques for the identification of pathogenic fungi and parasites will also be included. PRQ: Consent of school.

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.

476. SPECIAL TOPICS AND COMPREHENSIVE EXAMS (3). Exploration of topics relevant to the profession of medical laboratory sciences. Application of all previously learned theory and practicum skills in the medical laboratory sciences program through comprehensive exams. Includes reviews and quizzes over hematology/hemostasis, microbiology/mycology/parasitology, chemistry, immunology, immunohematology, urinalysis/body fluids and lab operations. PRQ: Consent of school.

486. MEDICAL LABORATORY SCIENCE PRACTICUM I (10). Full-time clinical experiences in selected hospital laboratories for traditional students (semester I). Supervision and guidance by qualified medical laboratory scientists in the disciplines of hematology, hemostasis, microbiology, medical biochemistry, medical immunology, immunohematology, urinalysis, body fluids, molecular diagnostics, or laboratory operations. PRQ: Consent of School.

487. MEDICAL LABORATORY SCIENCE PRACTICUM II (10). Full-time clinical experiences in selected hospital laboratories for traditional students (semester II). Supervision and guidance by qualified medical laboratory scientists in the disciplines of hematology, hemostasis, microbiology, medical biochemistry, medical immunology, immunohematology, urinalysis, body fluids, molecular diagnostics, or laboratory operations. PRQ: Consent of School.

488. MEDICAL LABORATORY SCIENCE DEGREE COMPLETION PRACTICUM (10-15). Full-time clinical experiences in selected hospital laboratories for degree completion students only under the supervision and guidance of qualified medical laboratory scientists in the disciplines of hematology, hemostasis, microbiology, medical biochemistry, medical immunology, immunohematology, urinalysis, body fluids, molecular diagnostics, or laboratory operations. PRQ: Consent of School.

Health Studies (HLTH)

473. TOPICS IN HEALTH STUDIES (1-3). Examination of contemporary issues and problems in medical laboratory sciences, nutrition, public health, and health education. May be repeated to a maximum of 6 semester hours.

494. INDEPENDENT STUDY IN HEALTH STUDIES (1-3). Independent study under direction of a faculty member in the medical laboratory sciences, nutrition, public health, and health education programs. May be repeated to a maximum of 6 semester hours when subject varies. PRQ: Consent of school.

498. SEMINAR IN HEALTH STUDIES (1-3). Professional career development, opportunities for employment, organization affiliations, and legislation as it affects the programs in the School of Health Studies. PRQ: Consent of school.

499. HONORS CAPSTONE PROJECT (3). Intensive study of a selected topic in health studies involving experimental or other scholarly work that serves as the capstone project in the University Honors Program. PRQ: Consent of school.

Nutrition (NUTR)

100. HEALTHY COOKING (1). Fundamental and basic principles and procedures for food preparation using standard kitchen utensils. Hands-on introduction to cooking basics including knife skills, sanitation, and basic cooking techniques such as measuring, baking, sautéing, steaming, and roasting. Focuses on balancing nutrition with good taste and health promotion.

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 ServSafe Food Protection Manager Certification.

200B. FOOD PREPARATION LABORATORY (2). Designed to accompany NUTR 200A. Two 3-hour periods a week. PRQ or CRQ: NUTR 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 NUTR 309. PRQ: BIOS 103, BIOS 109, BIOS 208, or equivalent.

295. COOPERATIVE EDUCATION I FOR NUTRITION, HEALTH, AND WELLNESS (1-3). Cooperative work experience for students in the nutrition, health, and wellness 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. PRQ: Declared nutrition, health, and wellness major.

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 310, NUTR 201. CRQ: BIOS 357.

310. APPLIED NUTRITION THROUGH THE LIFE CYCLE (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: NUTR 309 with a grade of C or better. Offered spring semester only.

395. COOPERATIVE EDUCATION II FOR NUTRITION, HEALTH, AND WELLNESS (1-3). Advanced cooperative work experience for students in the nutrition, health, and wellness emphasis 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: NUTR 295 or equivalent, declared nutrition, health, and wellness major, and consent of school.

404. NUTRITION AND COMMUNITY FOOD SYSTEMS (2-5). Interdisciplinary examination of current trends in the food industry, agriculture, and community environment in relation to food sustainability, social and nutritional health and wellness. Organized service learning component requires participation in local community food systems. PRQ: Junior standing or 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: HDFS 230 or HDFS 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: NUTR 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: NUTR 409 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: NUTR 310 with a grade of B or better, and CHEM 231.

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: NUTR 415 with a grade of B or better and consent of school.

419. NUTRITION FOR HEALTH PROMOTION AND CHRONIC DISEASE PREVENTION (3). Study of the role that dietary modifications play in the prevention and treatment of chronic disease based on the fundamentals of nutrition science and current nutrition research. Apply traditional and emerging nutrition therapies to menu-planning strategies including lifestyle, cultural, and genetic factors for health promotion. PRQ: NUTR 310 with a grade of C or better.

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 HOSP 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.

428. NUTRITION AND AGING (3). Physiological aspects of nutrition for older adults. Understanding of physiological changes that occur during aging; the impact of these changes on nutrition needs and how nutrition impacts aging process. Emphasis on assessment of dietary factors and relation to chronic diseases associated with aging in this population. Participation in local programs that address the needs of the older adult population. Design and implementation of one program per semester to foster community awareness of the needs of this population. PRQ: At least junior standing and NUTR 201.

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: NUTR 409, or consent of school.

497. **INTERNSHIP IN NUTRITION, HEALTH, AND WELLNESS** (1-15). Supervised participation in professional settings. Experiences appropriate to professional interest in nutrition, health, and wellness. May be repeated to a maximum of 15 semester hours. When taken in conjunction with NUTR 395, Cooperative Education II for Nutrition, Dietetics, and Hospitality Management, total enrolled credit hours in both courses may not exceed 15 hours. S/U grading basis may be used.

Public Health and Health Education (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.

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.

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.

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 206 or 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. PRQ: STAT 100, STAT 200, 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. PRQ: MATH 110 with a grade of C or better, or satisfactory performance on the Math Placement Examination. CRQ: BIOS 213 or BIOS 313; and CHEM 110 or CHEM 210; or consent of school.

400. **METHODS AND MATERIALS IN MIDDLE SCHOOL AND HIGH 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 NUTR 201 or NUTR 405, PHHE 404, PHHE 406, PHHE 408, PHHE 410, PHHE 412, or PHHE 472, or consent of school. CRQ: PHHE 482.

404. **DRUGS IN SOCIETY** (3). Exploration of the psychological, social, medical, legal, and economic aspects of use, misuse, and abuse of substances. Emphasis on issues, techniques, and resources necessary for implementing drug prevention programs within various settings.

406. **DIMENSIONS OF HUMAN SEXUALITY** (3). Exploration of psychological, social, and biological components of human sexuality, in the context of human development. A positive approach to exploring issues, techniques, and resources necessary for the creation and implementation of comprehensive sexuality programs in various 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. **COPING WITH DEATH, DYING, AND LOSS** (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.

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. PRQ: PHHE 325 and MATH 110 with a grade of C or better, or satisfactory performance on the Math Placement Examination.

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.

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 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 404, PHHE 406, and PHHE 482, minimum cumulative overall GPA of 2.75, or consent of school.

487. PUBLIC HEALTH PRE-INTERNSHIP SEMINAR (1). Preparation for field internship placements. Ethical and professional conduct, formulation of career goals and internship objectives, and formalization of internship site arrangements. PRQ: Consent of school.

489. INTERNSHIP 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. Students must be enrolled during their last semester and have all remaining degree requirements completed or in progress. S/U grading. PRQ: PHHE 487 with a grade of C or better and consent of school.

Health Studies Faculty

Jeanne M. Isabel, Ed.D., Northern Illinois University, associate professor, chair
 Sheila Barrett, Ph.D., Florida International University, associate professor
 Carolinda Douglass, Ph.D., RAND Graduate School of Policy Studies, professor
 Josephine Ebomoyi, Ph.D., University of Northern Colorado, assistant professor
 Sarah Geiger, Ph.D., West Virginia University, assistant professor
 Priyanka Ghosh Roy, Ph.D., The University of Georgia-Athens, assistant professor
 Jennifer Gray, Ph.D., University of Illinois, Chicago, associate professor
 Lynn Herrmann, Ph.D., University of Illinois, Urbana-Champaign, associate professor
 Arlene Keddie, Ph.D., University of Texas, associate professor
 Jinsook Kim, Ph.D., University of California-Los Angeles, associate professor
 Judith Lukaszuk, Ph.D., University of Pittsburgh, professor
 Kathryn Mazurek, Ph.D., University of Illinois, assistant professor
 Henna Muzaffar, Ph.D., University of Illinois, assistant professor
 Julie Patterson, Ph.D., University of Wisconsin, Madison, assistant professor
 Tomoyuki Shibata, Ph.D., University of Miami, associate professor
 Masih Shokrani, Ph.D., Meharry Medical College, associate professor
 Josephine Umoren, Ph.D., University of Nebraska, associate professor
 Ping Yao, Ph.D., University of Missouri, Columbia, associate professor

School of Interdisciplinary Health Professions (HSCI, REHB)

The School of Interdisciplinary Health Professions offers majors in health sciences (B.S.) with a degree completion emphasis, rehabilitation and disability Services (B.S.), and a minor in deafness. Degree paths in these majors prepare students for entering the workforce, professional degree programs, or advancement in health careers. Opportunities for skill development, academic success, and career exploration in health and rehabilitation-related fields are fostered through collaborative learning, cocurricular activities, and faculty mentoring. Academic offerings in the health sciences programs include prerequisite classes for medical laboratory sciences, nursing, and physical therapy programs with efficient course sequencing toward degree completion. Academic offerings in rehabilitation programs prepare students for entry level employment and preparatory course work for graduate studies in occupational therapy and rehabilitation counseling.

Majors in the School of Interdisciplinary Health Professions who are preparing for professional practice may be dismissed from a program on the basis of either academic deficiencies or nonprofessional performance. Specific criteria relating to these areas are made known to each student at the time the professional phase of a program is initiated.

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 and health science-based curriculum with a focus on healthcare leadership skills, financial principles, management strategies, and standards to improve patient care. This major is intended for students interested in the fields of medical laboratory sciences, nursing, physical therapy, and other health professions.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (21)

- HSCI 310 - Introduction to Health and Human Sciences (3)
- HSCI 318 - Medical Terminology (3)
- HSCI 350 - Critical Thinking for Health and Human Services Professionals (3)
- HSCI 410 - Legal and Ethical Issues for Health and Human Sciences Professionals (3)
- HSCI 455 - Management of Financial Resources in Health and Human Sciences Organizations (3)
- HSCI 460 - Introduction to Research in Health and Human Sciences (3)
- **REHB 200 - Disability in Society (3)

Requirements outside School (15-16)

- *ENGL 203 - Rhetoric and Composition II: Researched Writing in the Domains (3),
OR ENGL 204 - Rhetoric and Composition, Accelerated Researched Writing in the Domains (3)
- *HDFS 280 - Human Development, the Family, and Society (3),
OR PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)
- *PSYC 102 - Introduction to Psychology (3)

- *STAT 100 - Basic Statistics (3)
OR STAT 200 - Elementary Statistics (4)
- UHHS 365 - Overview of Gerontology (3)

Select one of the following emphases:

Emphasis 1: Pre-Physical Therapy (44-46)

This emphasis is designed for students interested in pursuing a doctorate in physical therapy (DPT) or other health-related fields that require a graduate degree for entry-level practice. The required course work provides the foundation needed to enter many health-related professional programs. Limited retention program: students must maintain at least a 3.00 cumulative NIU GPA after a total of 45 post-secondary credits earned. Students not meeting this minimum cumulative GPA requirement will be changed to Emphasis 2: General.

Requirements in School (3)

- AHPT 405 - Physical Therapy and the Rehabilitation Process (3)

Requirements outside School (41-43)

- BIOS 208 - Fundamentals of Cellular Biology (3)
- BIOS 209 - Fundamentals of Organismal Biology (3)
- BIOS 210 - Fundamentals of Cellular Biology I Laboratory (1)
- BIOS 211 - Fundamentals of Organismal Biology 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)
- *MATH 155 - Trigonometry and Elementary Functions (3),
OR *MATH 229 - Calculus (4)
- *NUTR 201 - Human Nutrition (3),
OR NUTR 306 - Nutrition in Relation to Health and Exercise (3),
OR NUTR 308 - Current Problems and Trends in Nutrition and Foods (3)
- *PHYS 210 - General Physics I (4)
- *PHYS 211 - General Physics II (4)
- PSYC 316 - Introduction to Psychopathology (3)

Total Hours for Emphasis 1. Pre-Physical Therapy: 80-83

Emphasis 2: General (31-41)

This emphasis is designed for students interested in pre-medical laboratory sciences² and pre-nursing³ course offerings or entry into many other health related fields. Students should explore their academic and career goals regularly with their advisor and make course selections based upon those goals.

Requirements in School (6)

- *HSCI 430 - Working with Diverse Populations in Health and Human Sciences (3)
- HSCI 450 - Administration for Professionals in Health and Human Sciences (3)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

¹ Allow substitution with any three-semester-hour Abnormal Psychology course.

² Course work recommended as prerequisites for the medical laboratory sciences major.

³ Course work recommended as prerequisites for the nursing major.

Requirements outside School (29-41)

*BIOS 103 - General Biology (3)³ AND *BIOS 105 - General Biology Lab (1)³,
 OR BIOS 208 - Fundamentals of Cellular Biology (3)² AND BIOS 210 - Fundamentals of Cellular Biology Laboratory (1)² AND BIOS 209 - Fundamentals of Organismal Biology (3)² AND BIOS 211 - Fundamentals of Organismal Biology Laboratory (1)²
 BIOS 213 - Introductory Bacteriology (3)^{2,3},
 OR BIOS 313 - Microbiology (4)^{2,3}
 BIOS 357 - Human Anatomy and Physiology (5)^{2,3}
 *CHEM 110 - Chemistry (3)³ and *CHEM 111 - Chemistry Laboratory (1)³,
 OR *CHEM 210 - General Chemistry I (3)² AND *CHEM 212 - General Chemistry Laboratory I (1)² AND *CHEM 211 - General Chemistry II (3)² AND *CHEM 213 - General Chemistry Laboratory II (1)²

Select five of the following (13-16):

AHLS 211 - Introduction to the Medical Laboratory Sciences (3)²
 CHEM 310² - Introductory Organic and Biological Chemistry (3)
 AND CHEM 311² - Introductory Organic and Biological Chemistry Laboratory (1)
 *COMD 220 - Introduction to Communicative Disorders (3)
 HSCI 217 - Academic Success and Career Development in Health and Human Sciences (1)
 *NUTR 201 - Human Nutrition (3)³
 **PHHE 295 - Introduction to Public Health (3)
 PSYC 316 - Introduction to Psychopathology (3)
 REHB 327 - Introduction to Rehabilitation Services (3)
 REHB 372 - Introduction to Occupational Therapy (3)
 REHB 493 - Counseling in Rehabilitation Services (3)
 REHB 497B - Internship in Health Sciences (3)
 OR other course(s) as approved by adviser

Total Hours for Emphasis 2. General: 71-84

Emphasis 3: Degree Completion

This off-campus/online emphasis is designed uniquely for health and human sciences professionals. 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 applied associates degree or course work was earned.

The student who wishes to apply for this this emphasis must

be admitted to NIU

have a cumulative GPA of at least 2.00

submit a Health Sciences Degree completion application including a written professional goals statement and copy of the professional credential. The application is available via: <http://niu.edu/ora/> or the College of Health and Human Sciences advising office.

Students may be awarded up to 30 semester hours of proficiency credit for the learning experiences and education in the discipline in which they hold certification and/or licensure. Proficiency credit will be awarded during the last semester prior to degree completion. Students in this emphasis are exempt from the 30 semester hour university residence requirement.

Requirements in School (7)

HSCI 430 - Working with Diverse Populations in Health and Human Sciences (3)
 HSCI 450 - Administration for Professionals in Health and Human Sciences (3)
 HSCI 490 - Capstone in Health Sciences (1)

Elective (3)

**PHHE 295 - Introduction to Public Health (3)
 OR selected with consent of adviser (3)

Total Hours for Emphasis 3. Degree Completion: 46-47

Major in Rehabilitation and Disability Services (B.S.)

Students in this degree are preparing as entry-level professionals in the area of human/social services to persons with disabilities. The required courses provide a basic background in disability and rehabilitation concepts. Entry-level positions (e.g., job coach, job placement specialist, case manager) can be obtained by students with the baccalaureate degree. Students desiring clinical positions (e.g., rehabilitation counselor) must obtain a master's degree in Rehabilitation Counseling.

Requirements in School (30)

HSCI 318 - Medical Terminology (3)
 **REHB 200 - Disability in Society (3)
 REHB 327 - Introduction to Rehabilitation Services (3)
 REHB 482 - Employment Services in Vocational Rehabilitation (3)
 ^REHB 492 - Medical Aspects of Disability in Rehabilitation (3)
 REHB 493 - Counseling in Rehabilitation Services (3)
 REHB 494 - Professional Practices in Rehabilitation Services (3)
 REHB 495 - Assistive Technology in Rehabilitation (3)
 Two of the following (6):
 *CAHC 400 - Exploration in the Counseling Profession (3)
 COMD 220 - Introduction to Communicative Disorders (3)
 REHB 372 - Introduction to Occupational Therapy (3)
 REHB 497A - Internship in Rehabilitation and Disability Services (3)

Requirements outside School (18-19)

*CAHC 211 - Career Planning (3)
 ^HSCI 460 - Research in Health and Human Sciences (3)
 *PSYC 102 - Introduction to Psychology (3)
 *PSYC 225 - Lifespan Development: Childhood Through Adulthood (3),
 OR *HDFS 280 - Human Development, the Family and Society (3)
 PSYC 316 - Introduction to Psychopathology (3)
 *STAT 100 - Basic Statistics (3),
 OR *STAT 200 - Elementary Statistics (4)
 Course work chosen with adviser's approval (24) at least 9 semester hours at the 300-400 level and one course needs to be related to diversity.

Note: Students considering occupational therapy graduate training are encouraged to enroll in BIOS 311 and BIOS 357.

Total Hours for Rehabilitation and Disability Services: 72-73

Accelerated B.S. in Rehabilitation and Disability Services/M.S. in Rehabilitation Counseling Program**Admission**

This program leads to both the B.S. in Rehabilitation and Disability Services and the M.S. in Rehabilitation Counseling. This program is open to all B.S. in Rehabilitation and Disability Services majors who will have completed at least 96 semester hours with a 3.25 or better GPA. Students who have met these standards must also apply for admission to the M.S. in Rehabilitation Counseling program under the special provisions of this program. Students must meet Graduate School application deadlines. Interested students should talk with an adviser as early as possible and are encouraged to apply during their junior year.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused course.

¹ Allow substitution with any three-semester-hour Abnormal Psychology course.

² Course work recommended as prerequisites for the medical laboratory sciences major.

³ Course work recommended as prerequisites for the nursing major.

Curriculum

Students must complete all the requirements for the B.S. in Rehabilitation and Disability Services (besides the 24 hours of advised course work) and the general education requirements before admission. Beginning with the first semester of their final undergraduate year, students will start taking classes in the M.S. in Rehabilitation Counseling program. These courses will count toward the final 18 credits of the undergraduate degree. Upon receiving their undergraduate degree, students will work with an adviser to establish a timeline for completion of the M.S. in Rehabilitation Counseling.

Minor in Deafness (21)

Health sciences and rehabilitation and disability services majors are eligible to complete this minor.

Requirements (21)

COMD 300 - Introduction to Audiology
 FLSL 101 - Beginning American Sign Language I (3)
 FLSL 102 - Beginning American Sign Language II (3)
 FLSL 201 - Intermediate American Sign Language I (3)
 FLSL 202 - Intermediate American Sign Language II (3)
 *REHB 200 - Disability in Society (3)
 REHB 327 - Introduction to Rehabilitation Services (3),
 OR COMD 421 - Aural Rehabilitation (3)

Six or more semester hours in the minor must be taken at NIU.

Course List

Health Sciences (HSCI)

217. ACADEMIC SUCCESS AND CAREER DEVELOPMENT IN HEALTH AND HUMAN SCIENCES (1-3). Identification of student academic strengths, skills, and interests in the exploration of and career planning for various health service occupations. Focus on preparation for entry into specialized training programs or health service positions. May be repeated to a maximum of 3 semester hours. PRQ: Health science majors or consent of school.

310. INTRODUCTION TO HEALTH AND HUMAN SCIENCES (3). Interdisciplinary overview of health and human sciences including individual, family, and community health and well-being; health and human sciences organizations; professional practice; and the life course model. PRQ: CHHS major with at least sophomore standing or Gerontology minor or consent of school.

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.

350. CRITICAL THINKING FOR HEALTH AND HUMAN SERVICES PROFESSIONALS (3). 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.

399. HONORS SEMINAR: INTERPROFESSIONALISM IN HEALTH SCIENCES (3). Learn about, from, and with each other through readings and discussion to develop skills and understanding to work together in teams in health and human sciences. PRQ: Junior standing and Admission to University Honors Program or consent of the college.

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 Health Sciences Emphasis 3; or consent of school.

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 Health Sciences Emphasis 3; or consent of school.

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 Health Sciences Emphasis 3; or consent of school.

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 Health Sciences Emphasis 3; or consent of school.

460. 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 100 or STAT 200 or UBUS 223; and CHHS major with at least junior standing; or Health Sciences Emphasis 3; or consent of school.

490. CAPSTONE IN HEALTH SCIENCES (1-3). Analysis of academic learning experiences related to a defined area of study and tied to career goals. Integration of the perspectives of a practitioner and application to a case scenario in a defined professional setting. Reflection of initial educational goals and plans for professional development recommended to be taken in the final semester prior to graduation. S/U grading may be used. PRQ: Health sciences major or consent of school.

497. INTERNSHIP IN HEALTH SCIENCES (3-12). Supervised experiences in professional settings to meet learning goals for entry-level work either through an internship or associated with concurrent relevant health or human services employment. Students must demonstrate preparation and gain approval from internship coordinator to register. May be repeated to a maximum of 12 semester hours. S/U grading basis may be used. PRQ: Consent of department.

Rehabilitation and Disability Services (REHB)

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.

300. PSYCHIATRIC DISABILITY IN SOCIETY (3). Orientation to the field of psychiatric rehabilitation and exploration into the history, philosophy, practice, and current trends related to maximizing psychological, societal, vocational, and economic independence of people with psychiatric disabilities.

327. INTRODUCTION TO REHABILITATION SERVICES (3). Survey of various fields and professions providing rehabilitation and related services to persons with disabilities.

372. INTRODUCTION TO OCCUPATIONAL THERAPY (3). Exploration of the field of occupational therapy including history, philosophy, scope and areas of practice, ethics, training, credentialing, roles and responsibilities, and evidenced based practices of occupational therapists. Special attention given to health promotion and occupational therapy as part of an interdisciplinary team with disciplines including speech-language pathology, physical therapy and rehabilitation services. PRQ: At least sophomore standing or consent of school.

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: At least junior standing or consent of school.

482. EMPLOYMENT SERVICES IN VOCATIONAL REHABILITATION (3). Overview of the systems and accommodative techniques for providing employment services (e.g., job coaching) to people with disabilities.

492. MEDICAL ASPECTS OF DISABILITY IN REHABILITATION (3). Introduction to the anatomy and physiology of select body systems and associated impairments. An emphasis is placed on medical terminology as it relates to comprehension and the provision of rehabilitation services.

493. COUNSELING IN REHABILITATION SERVICES (3). Counseling principles and techniques as related to assessment, treatment, parent conferences, staffings, and eliciting parent/client cooperation.

494. PROFESSIONAL PRACTICES IN REHABILITATION SERVICES (3). Attention on typical functions of entry-level rehabilitation services including case documentation, interviewing, assessment procedures, service plan development, case closure, and ethical behavior. Emphasis also on practices for obtaining an entry-level position or internship in rehabilitation services. PRQ: REHB 200 and REHB 327.

495. ASSISTIVE TECHNOLOGY IN REHABILITATION (3). History of assistive technology (AT) and how technologies are used by individuals with disabilities in educational, vocational, community, and domestic settings. Topics include AT categories and types, legislation, service delivery systems, hardware and software systems, universal design principles, ethics, and evaluation. PRQ: REHB 492.

497. INTERNSHIP IN REHABILITATION AND DISABILITY SERVICES (3-12). Supervised experiences in professional settings to meet learning goals for entry-level work either through an internship or associated with concurrent relevant health or human services employment. Students must demonstrate preparation and gain approval from internship coordinator to register. May be repeated to a maximum of 12 semester hours. S/U grading basis may be used. PRQ: REHB 494 and consent of department.

School of Interdisciplinary Health Professions (SIHP)

498. INDEPENDENT STUDY (1-6). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. S/U grading may be used. PRQ: Consent of school.

Interdisciplinary Health Professions Faculty

Paul E. Priester, Ph.D., Loyola University Chicago, professor, chair

Daniel L. Boutin, Ph.D., Pennsylvania State University, associate professor

Shondra Clay, Ph.D., University of Illinois, assistant professor

Bryan K. Dallas, Ph.D., Southern Illinois University Carbondale, associate professor

Melani Duffrin, Ph.D., Ohio University, professor

Beverly Henry, Ph.D., Loyola University Chicago, professor

Amanda K. McCarthy, Ed.D., Northern Illinois University, associate professor

Noel Ysasi, Ph.D., University of Texas Rio Grande Valley, assistant 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. Prior military service may be considered for proficiency credit towards lower division courses in the minor.

MILS 101 - Introduction to the Army and Critical Thinking (2)
 MILS 102 - Adaptive Leadership and Professional Competence (2)
 MILS 201 - Leadership and Decision Making (2)
 MILS 202 - Army Doctrine and Team Development (2)
 MILS 301 - Training Management and Warfighting Functions (3)
 MILS 302 - Applied Leadership in Small Unit Operations (3)
 MILS 401 - The Army Officer (4)
 MILS 402 - Company Grade Leadership (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 - Managing Individuals, Teams, and Organizations (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. INTRODUCTION TO THE ARMY AND CRITICAL THINKING (2). Introduces the Army Profession, Professional Competence, Adaptability, Teamwork, Lifelong Learning, and Comprehensive Fitness. Focus on developing basic knowledge and comprehension of Army leadership dimensions, attributes and core leader competencies while gaining an understanding of the Reserve Officer Training Corps Program, its purpose in the Army, and its advantages.

102. ADAPTIVE LEADERSHIP AND PROFESSIONAL COMPETENCE (2). Introduction to the professional challenges and competencies needed for effective execution of the profession of arms and Army communication. Continuation of Army ethics and values that shape the army and the specific ways that these ethics are inculcated into Army culture.

[#] Fulfills the Human Diversity Requirement.

[^] This is a Writing Infused Course.

¹ Available to contracted cadets only.

² Also meets PME requirement for commissioning.

201. LEADERSHIP AND DECISION MAKING (2). Study of leadership, personnel management, critical thinking, Army problem solving, Troop Leading Procedures, Operations Orders process, and ethical decision making. Cadets explore 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.

202. ARMY DOCTRINE AND TEAM DEVELOPMENT (2). Examines the challenges of leading teams in complex operational environments. The course highlights dimensions of terrain analysis, patrolling and operations orders. Further study of the theoretical basis of the Army Leadership Requirements Model 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. PRQ: MILS 201, or military science minor, or consent of department.

Advanced

301. TRAINING MANAGEMENT AND THE WARFIGHTING FUNCTIONS (3). Challenges cadets to study, practice, and apply the fundamentals of Army Leadership, Officership, Army Values and Ethics, Personal Development, and small unit tactics at the platoon level. Cadets receive systematic and specific feedback on their leadership attributes, values, and core leader competencies from instructor, other ROTC cadre, and MSL IV Cadets using the Cadet Officer Evaluation System (OES). Successful completion of this course helps prepare for the ROTC Cadet Leader Course (CLC). PRQ: MILS 201 and MILS 202, or military science minor, or consent of department.

302. APPLIED LEADERSHIP IN SMALL UNIT OPERATIONS (3). Study, practice, and application of fundamentals of Army Leadership, Officership, Army Values and Ethics, Personal Development, and small unit tactical operations at the platoon level. Skill development includes planning, coordinating, navigating, motivating and leading a squad and platoon in the execution of a mission during a classroom PE, a Leadership Lab, or during a Leader Training Exercise (LTX). Systematic and specific feedback on your attributes, values, and core leader competencies from your instructor, other ROTC cadre, and MSL IV Cadets using the Cadet Officer Evaluation System (OES) to further develop skills for a successful officer. Successful completion of this course needed to prepare to attend the ROTC Cadet Leadership Course (CLC). PRQ: MILS 301, or military science minor, or consent of department.

325. BASIC INTERNSHIP IN MILITARY SCIENCE (3). An internship with 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 Cadet Cadet Initial Entry Training, 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 Cadet Leader Course, normally held at Fort Knox, Kentucky. PRQ: MILS 301 and MILS 302.

401. THE ARMY OFFICER (4). Develop military knowledge and skills necessary for the role of Second Lieutenant in the United States Army. Utilize hands on, student centric learning to display the application of leadership through battalion staff positions, resourcing and executing training, and leading peers.

402. COMPANY GRADE LEADERSHIP (4). Case studies and historical lessons to challenge students to apply critical thought for competent leadership decisions through the lens of a company grade leader. Includes a cursory review of the larger Army organization, how the Army organization resources and enables Brigade Combat Teams to carry out military strategy and the military portion of national power in concert with diplomacy, information, and economic power. 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 Jay Morrison, M.A., Webster University, professor of military science, chair
 Master Sergeant Rufus Beamon, B.A., American Military University, senior military instructor
 Major Amahdy Bradley, M.B.A., Loyola University, adjunct instructor
 Captain Derrek Montoya, M.S., Embry-Riddle Aeronautical University, assistant professor of military science
 Staff Sergeant Brandon Tabor, adjunct instructor
 Rodney Williams, M.B.A., Strayer University, scholarship and enrollment officer/instructor
 Staff Sergeant Justin Wolfe, adjunct instructor

School of Nursing (NURS)

Admission to the major in nursing in the School of Nursing is limited. See "Limited Admissions and Limited Retention Requirements" in the Admission section of this catalog.

The School of Nursing offers majors in nursing (B.S.) and baccalaureate degree completion. Students interested in one of the school's majors 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 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. The Undergraduate Nursing Student Handbook contains additional policies related to admission and progression through the nursing program.

Nursing Program

The School of Nursing offers the B.S. degree with a major in nursing, successful completion of which qualifies the graduate to take 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 option 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.

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 Option

The R.N.-B.S. in nursing completion option is designed to award credit to registered nurses for their recent education and previous learning experiences in the field of nursing. Students who are admitted early via a partnership agreement with another institution, course work from that institution will be recognized and credit awarded prior to graduation. 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 option are exempt from the 30 semester hour university residence requirement.

Registered nurses who graduated within the past five years from a nursing program will automatically be granted the appropriate number of escrow credits provided they have practiced as a registered nurse within the past five years. Registered nurses who graduated more than five years ago who have not practiced as a registered nurse within the past five years will need to provide evidence of a refresher course. RNs who must take a refresher course may be provisionally admitted to the nursing program, but may only complete a maximum of 6 credit hours until fully admitted. 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 306, 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 2.75 GPA at the completion of the second semester or be dismissed from the nursing program. R.N. students whose cumulative GPA falls below 2.75 after completing 9 semester hours at NIU will be dismissed from the nursing major. All other nursing students whose cumulative GPA is less than 2.75 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. A student also may be dismissed from the nursing major for unprofessional behavior or actions which threaten the health and safety of patients. It is the responsibility of students to secure a copy of the dismissal policy from the office of the School of Nursing.

Students must repeat any required nursing course in which they receive a grade of D or F 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."

In addition, students who receive a grade of D or F in a core nursing course² will be required to enroll in NURS 380 (Promoting Academic and Career Success in Nursing), the following semester.

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.

* Available for general education credit.

² Core nursing courses: NURS 304, NURS 305, NURS 308, NURS 314, NURS 315, NURS 318, NURS 319, NURS 336, NURS 419, NURS 422, NURS 431, NURS 432.

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 (61-64)

NURS 302 - Professional Nursing (3),
 OR NURS 347³ - Concepts of Professional Nursing (4)
 NURS 303 - Foundations of Nursing Clinical (2)
 NURS 304 - Health Assessment (2) and NURS 307 - Health Assessment Application (1)
 OR NURS 306³ - Health Assessment for Nursing Practice (2)
 NURS 305 - Foundations of Nursing (3)
 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 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 488¹ - 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 203 - Rhetoric and Composition II, Researched Writing in the Domains (3),
 OR *ENGL 204 - Rhetoric and Composition, Accelerated Researched Writing in the Domains (3)
 *HDFS 280 - Human Development, the Family, and Society (3),
 OR *PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)
 *NUTR 201 - Human Nutrition (3)
 *PSYC 102 - Introduction to Psychology (3)
 *STAT 100 - Basic Statistics (3),
 OR STAT 200 - Elementary Statistics (4)

Total Hours for a Major in Nursing: 92-98

Online R.N.-B.S. Courses

Registered nurses who are seeking baccalaureate preparation leading to a B.S. degree with a major in nursing are served via online, technology-enhanced courses. Online course requirements coincide with on-campus requirements in the degree completion option. Students wishing additional information should contact the School of Nursing.

Course List (NURS)

302. PROFESSIONAL NURSING (3) Overview of systems within nursing and healthcare, including evidence-based care and the collaborative roles of the healthcare team. Introduction to the major concepts related to the roles of the professional nurse and development of critical thinking skills, 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. Not open to students with R.N. status. PRQ: PSYC 102. CRQ: ENGL 203 or ENGL 204.

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 (2). 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 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 or BIOS 313 and BIOS 357 and NUTR 201; and HDFS 280 or PSYC 225. CRQ: NURS 302.

306. HEALTH ASSESSMENT FOR NURSING PRACTICE (2). 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, documenting, and communicating normal findings and common deviations from normal. Application of cognitive, psychomotor, communication, and critical thinking skills in the performance of a systematic, holistic health assessment by nurses. PRQ: R.N. status or consent of school.

307. HEALTH ASSESSMENT APPLICATION (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 100 or STAT 200; and NURS 303 and NURS 304 and NURS 305 and NURS 307 and NURS 308; or R.N. status.

* Available for general education credit

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

¹ Requirements can be met through escrow/credit proficiency testing for R.N.-B.S. students.

² Prelicensure students only.

³ For Registered Nurse students only.

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.

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.

353. CLINICAL INTERNSHIP: FOCUSED EXPERIENCES IN NURSING (1-3). Clinical experiences related to the role of the nurse in providing safe, effective, quality, holistic, collaborative, patient-centered health care in an identified area of nursing focus under the direction of a nursing faculty member. May be repeated to a maximum of 6 credit hours. PRQ: NURS 313 and consent of program.

380. PROMOTING ACADEMIC AND CAREER SUCCESS IN NURSING (1). Identification of student strengths and areas for improvement to promote academic achievement and career success in nursing. Emphasis on targeted content areas, critical thinking, learning strategies, and study and test-taking skills. May be repeated to a maximum of 3 credits. PRQ: Consent of school.

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. PRQ NURS 308. 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. This clinical practice experience emphasizes leadership and management applied to healthcare organizations and the care of culturally diverse aggregates. PRQ: NURS 312 and 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.

Nursing Faculty

Nancy Valentine, Ph.D., Brandeis University, professor, interim chair

Maryann Abendroth, Ph.D., University of Florida, associate professor

Laura Beamer, Ph.D., DNP, University of Utah, Purdue University, associate professor

Derryl Block, Ph.D., University of Pennsylvania, professor

Cathy Carlson, Ph.D., Indiana University, associate professor

Jie Chen, Ph.D., University of Cincinnati, associate professor

Marcia Cooke, DNP, Loyola University, assistant professor

Katherine Coulter, DNP, Chamberlain College of Nursing, assistant professor

Manju Daniel, Ph.D., Rush University, associate professor

Kari Hickey, Ph.D., Illinois State University, associate professor

Mary Hintzsche, DNP, Rush University, clinical assistant professor

Juan Mercado, DNP, University of Illinois, Chicago, clinical assistant professor

Elizabeth Moxley, Ph.D., University of Illinois, assistant professor

Kathleen Musker, Ph.D., Loyola University, associate professor

Nancy Petges, Ed.D., Northern Illinois University, assistant professor

Deborah Riddell, DNP, University of Illinois-Chicago, clinical assistant professor

Jeanette Rossetti, Ed.D., Northern Illinois University, Presidential Teaching Professor

Cris Sabio, Ph.D., Capella University, assistant professor

Linda Taylor, Ph.D., University of Wisconsin, Milwaukee, assistant professor

College of Liberal Arts and Sciences

Judy Ledgerwood, Ph.D., acting dean
David S. Ballantine, Ph.D., associate dean for undergraduate affairs
Leslie Matuszewich, Ph.D., associate dean for research and graduate affairs
Kirk Miller, Ph.D., associate dean for academic administration

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 Geographic and Atmospheric Sciences
 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 Nonprofit and NGO Studies
 B.A. and B.S. in nonprofit and NGO studies

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

Department of Statistics and Actuarial Science
 B.S. in actuarial science
 B.S. in statistics

Department of World Languages and Cultures
 B.A. in World Languages and Cultures

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 Office

The College of Liberal Arts and Sciences maintains an Advising Office to assist students in establishing their academic goals, planning their schedules, and interpreting university, college, and departmental policies and requirements. All students in the College of Liberal Arts and Sciences or undecided on a major within the college are advised in a two-tiered advising system. Advising services for major requirements are provided by professional and faculty advisers within that academic department, while advising services regarding broader college and university requirements are provided in the Liberal Arts and Sciences Advising Office.

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 60 semester hours from a single department toward the 120-semester-hour baccalaureate requirement. Any hours in excess of 60 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 65 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 World Languages and Cultures, and the department of Geographic and Atmospheric Sciences. For example, the 60-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 World Languages and Cultures. ENGL 103, ENGL 203, and ENGL 204 are not counted toward the 60-semester-hour maximum hours taken in the major in the Department of English. COMS 100 is not counted toward the 60-semester-hour maximum hours taken in the communication studies major in the Department of Communication. Students majoring in Meteorology in the Department of Geographic and Atmospheric Sciences may accumulate additional hours beyond the 60-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, foundational studies 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 Requirements 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. This requirement may be met by completing four courses or sequences from the lists below. The four courses/sequences must be selected from at least two of the three groups (A/B/C). 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 of the following courses to complete and which additional courses may be required for that major.

Undergraduate students who are seeking a double major that includes a B.S. in the College of Liberal Arts and Sciences, and who have satisfied the requirements for a B.S. degree in another college, will be considered to have satisfied the college B.S. requirements as long as all other required course work in the CLAS degree-granting program has been completed.

Group A. Mathematics

- *MATH 206 - Introductory Discrete Mathematics (3),
OR *MATH 210 - Finite Mathematics (3)
- *MATH 211 - Calculus for Business and Social Science (4),
OR *MATH 229 - Calculus I (4)
- MATH 230 - Calculus II (4)
- MATH 232 - Calculus III (4)
- MATH 240 - Linear Algebra and Applications (4)

Group B. Computation

- 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)
- *STAT 200 - Elementary Statistics (4)
- STAT 300 - Introduction to Probability and Statistics (3)

Group C. Lab Sciences

- *BIOS 103 - General Biology (3)
AND *BIOS 105 - General Biology Laboratory (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 213 - Introductory Bacteriology (3)

* Available for general education credit

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)
 *GEOG 101 - Introduction to Environmental Geography (3)
 AND GEOG 102 - Introduction to Environmental Geography
 Laboratory (1)
 *GEOG 105 - Weather, Climate, and You (3)
 AND GEOG 106 - Weather and Climate Laboratory (1)
 *GEOG 256 - Maps and Mapping (3)
 GEOG 302 - Soil Science (4)
 GEOG 359 - Introduction to Geography Information Systems (3)
 *GEOL 120 - Introductory Geology (3)
 AND *GEOL 121 - Introductory Geology Laboratory (1)
 GEOL 320 - Environments and Life Through Time (4)
 MET 300 - Meteorology (4)
 *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)

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 foundational studies quantitative literacy 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, World Languages and Cultures, History, and Philosophy, except for ENGL 103, ENGL 203, ENGL 204, 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. Unless otherwise indicated, students may apply up to 6 semester hours from courses that satisfy their major requirements to also satisfy the requirements for an interdisciplinary minor.

Students with a second major may, with the approval of the coordinator, count up to 6 semester hours applied to satisfy the requirements for each 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 World Languages and Cultures

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. Total semester hour requirements may be reduced if language courses are waived on the basis of high school preparation or placement examination.

Requirements

FLCL 101, and FLCL 102¹ - Beginning Latin I and II (3)
 FLCL 201, and FLCL 202¹ - Intermediate Latin I and II (3)
 *FLCL 271 - Classical Mythology (3)
 Three of the following (9)

- ENGL 307 - Drama and Conflict (3) (classical focus)
- ENGL 337 - Western Literature: Classical and Medieval (3)
- FLCL 481 - Special Topics in Classical Literature and Civilization (3)
- FLCL 483 - Directed Readings in Classical Languages (1-3)
- FLTR 271² - Literature in Translation (3)
- HIST 301 - History of Ancient Greece (3)
- HIST 303 - Imperial Rome (3)
- HIST 491A - Special Topics in History: Ancient (3)
- IDSP 291 - Art and Literature in the Ancient World (3)
- PHIL 321 - Ancient Philosophy (3)
- POLS 350 - Classical and Medieval Political Theory (3)

Nine 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 This is a Writing Infused Course.

² May be waived on the basis of high school preparation or placement examination.

³ May be counted toward the minor when topic is appropriate.

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)

- *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 459 - 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 - Exploring Human Language (3)
- ENGL 321 - Structure of Modern English (3)
- ^ENGL 322 - Language in American Society (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)
- FLSL 101 - Beginning American Sign Language I (3)
- *PHIL 105 - Logic and 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: Jeff Einboden, Department of English

The Departments of English and World Languages and Cultures 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 - Drama and Conflict (3)
 - ^*ENGL 310 - Ideas and Ideals in World Literature (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: Ismael M. Montana, Department of History

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 - Inequality 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)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

¹ Recommended for business majors.

² See catalog for prerequisites.

³ When topic is appropriate, with approval of 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/SOCI 335 - Immigration (3)
 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 - 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)
 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)
 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)
 *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 - Inequality in Latin America (3)
 ILAS 444 - Comparative Urbanization (3)
 JOUR 482 - International News Communications (3)
 ^*NUTR 406 - Global Food and Nutrition Issues (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 - Introduction to 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: Christina Abreu, 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. The 18 semester hours required for the minor must come from at least two departments, with no more than 12 semester hours from one department. Students participating in the Latino/Latin American Studies Minor may apply up to 9 semester hours from their major toward the minor.

Requirements (18)

*LATS 100 - Introduction to Latin American Studies (3)
 OR ^*HIST 382 - Modern Latin America (3)
 Five of the following (15)
 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 African, Oceanian, Native-American, Pre-Columbian and Latin-American Art (3)
 ECON 300 - Labor Economics
 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 for Heritage Speakers I (3)
 FLSP 301 - Advanced Spanish Grammar (3)
 ^FLSP 322 - Introduction to Spanish-American Literature (3)
 ^FLSP 361 - Spain Today (3)
 ^FLSP 362 - Latin America Today (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, Culture and Film (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 - Seminar on the Cultures of Spain (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/as 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 474 - History of Immigration and Ethnicity (3)
 *HIST 481 - Indigenous Mexico (3)
 HIST 482 - Mexico Since 1810 (3)
 ^*HIST 484 - History of Brazil (3)
 ^*HIST 486 - Poverty and Progress in Latin America (3)
 HIST 487 - The Latin American City (3)
 LATS 400 - Special Topics in Latino and Latin American Studies (3)

* Available for general education credit

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

LTIC 301 - Teaching with a Multicultural Perspective (3)
 MGMT 487 - Multinational Management (3)
 MKTG 367 - Principles of Global Marketing (3)
 MKTG 387 - International Study in Marketing (3)
 MKTG 467 - Global Marketing Management (3)
 POLS 260 - Introduction to Comparative Politics (3)
 POLS 381 - Regional Security (3)
 SOCI 361 - Race and Ethnicity (3)
 SOCI 362 - Sociology of Latinos (3)
 SOCI 379 - Collective Behavior and Social Movements (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in LGBTQ+ Studies

Coordinator: Kristen Myers, Director of the Center for the Study of Women, Gender and Sexuality

The interdisciplinary minor in LGBTQ+ Studies is recommended for all students interested in examining historical and contemporary issues related to identity, power, citizenship, and contributions of lesbian, gay, bisexual, transgender, and queer 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 Center for the Study of Women, Gender and Sexuality, 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 LGBTQ+ studies. Independent study and topics courses in a variety of departments may meet the minor requirements, with the approval of the coordinator of the LGBTQ+ Studies program, when substantial treatment of LGBTQ+ Studies is included in the course.

Students must complete 18 semester hours for this minor and are urged to complete WGSS 101, WGSS 350, and WGSS 432 as early as possible. No more than 9 semester hours from the list of requirements can be applied toward both the LGBT minor and the WGSS minor.

Requirements (18)

All LGBTQ+ Studies minors must take (9):

- *WGSS 101 - Women, Sex, and Gender Today (3)
 - *^WGSS 350 - Lesbian, Gay, Bisexual and Transgender Studies (3)
 - *WGSS 432 - Feminist and Queer Theories (3)
- Three of the following (9)
- ^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/^WGSS 434² - Language and Gender (3)
 - *HIST 367 - U.S. LGBT History (3)
 - *HIST 402 - Gender and Sexuality in History (3)
 - PHIL 103² - Contemporary Issues in Ethics (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)
- SCL 100 - Foundation of Social Change Leadership (3)
- SCL 200 - Application of Social Change Leadership (3)
- SOCI 357 - The Sociology of Gender (3)
- ^SOCI 450 - Social Inequality (3)
- ^SOCI 495¹ - Proseminar in Sociology (3)
- WGSS 300 - Research Methods in Women, Gender, and Sexuality Studies (3)
- *WGSS 332² - Growing Up Girl (3)
- WGSS 390 - Internship in Women, Gender, and Sexuality Studies (1-3)
- WGSS 430¹ - Special Topics in Women's Studies (3)
- WGSS 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, world languages and cultures, 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, with no more than three courses from one department.

Requirements (18-19)

Basic Courses (3-9)

- *ANTH 230 - Introduction to Linguistic Anthropology (3),
 OR ^ENGL 318 - Exploring Human Language (3),
 OR ENGL 321 - Structure of Modern English (3)

Additional Courses (9-16)

- 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)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

¹ May be counted toward the minor when topic is appropriate.

² If there is significant coverage of sexuality in course.

^FLAL 483 - Applied Linguistics and the Romance Languages (3)
 FLBU 103 - Beginning Burmese I (5)
 FLCH 101 - Beginning Chinese I (3)
 ^FLFR 301 - Breaking it Down: The Structure of French (3)
 ^FLFR 481 - Advanced French Phonetics and Phonology (3)
 FLGE 301 - Putting it all Together: Going Beyond the Basics (3)
 FLGE 481 - Breaking it Down: 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)
 FLSL 101 - Beginning American Sign Language I (3)
 FLSP 301 - Advanced Spanish Grammar (3)
 FLSP 302 - Advanced Composition in Spanish (3)
 FLSP 480 - Introduction to Hispanic Linguistics (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)
 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)
 WGSS 434/ENGL 434X - Language and Gender (3)
 Any one continuation course of the beginning non-Indo-European language courses (FLBU 103, FLCH 101, FLIN 103, FLJA 101, FLSL 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 About the Arts (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: Eric Jones, Acting 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; family and consumer sciences; world languages and cultures; geography; geology; history; music; political science; and public health.

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 294¹ - Introduction to Arts of Asia (3)
 ^ARTH 370¹ - Studies in Asian Art: India and Southeast Asia (3)
 ^ARTH 457 - Topics in Asian Art (3)
 FLBU 103, FLBU 104 - Beginning Burmese I and II (5, 5)
 FLBU 203, FLBU 204 - Intermediate Burmese I and II (5, 5)

* Available for general education credit.

[#] Fulfills the Human Diversity Requirement.

[^] This is a Writing Infused Course.

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.

FLBU 300 - Special Topics in Burmese Language, Literature, Linguistics or Culture (3)
 FLBU 400 - Special Topics in Burmese Language, Literature, Linguistics or Culture (3)
 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 300 - Special Topics in Indonesian Language, Literature, Linguistics or Culture (3)
 FLIN 400 - Special Topics in Indonesian Language, Literature, Linguistics or Culture (3)
 FLIN 421 - Introduction to Indonesian Literature (3)
 FLIS 481¹ - Independent Study in a Foreign Language (3)
 FLKH 103 - Beginning Khmer I (5)
 FLKH 104 - Beginning Khmer II (5)
 FLKH 203 - Intermediate Khmer I (3)
 FLKH 204 - Intermediate Khmer II (3)
 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)
 FLTA 300 - Special Topics in Tagalog Language, Literature, Linguistics or Culture (3)
 FLTA 400 - Special Topics in Tagalog Language, Literature, Linguistics or Culture (3)
 FLTH 103, FLTH 104 - Beginning Thai I and II (5, 5)
 FLTH 203, FLTH 204 - Intermediate Thai I and II (5, 5)
 FLTH 300 - Special Topics in Thai Language, Literature, Linguistics or Culture (3)
 FLTH 400 - Special Topics in Thai Language, Literature, Linguistics or Culture (3)
 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)
 HDFS 384 - Asian American Families (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 447 - History of Burma (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 480¹ - Spies, Lies and Secret Wars: CIA in the World (3)
 HIST 491J¹ - 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 378¹ - Political Islam (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 490¹ - Advanced Topics in Interdisciplinary Studies (3)
 Six or more semester hours in the minor must be taken at NIU.

Minor in Women's and Gender Studies

Coordinator: Kristen Myers, director, Center for the Study of Women, Gender and Sexuality

The minor in women's and gender 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 Center for the Study of Women, Gender, and Sexuality, 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 and gender 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 *WGST 101, *WGST 202, and WGST 432 as early as possible. No more than 9 semester hours from the list of requirements can be applied toward both the LGBT minor and the WGST minor.

Independent study and topics courses in a variety of departments may meet the minor requirements, with the approval from the director of the Center for the Study of Women, Gender and Sexuality, when substantial treatment of women's and gender studies is included in the course.

Requirements (18)

**WGST 101 - Women, Sex, and Gender Today (3)
 *WGST 201 - Gender and Justice in Global Perspectives (3)
 OR **WGST 202 - Women and Cultural Expression (3)
 WGSS 432 - Feminist and Queer 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)
 BKST 402 - The Africana Woman (3)
 **COMS 410 - Communication and Gender (3)
 ENGL 309 - Popular Genres (3),
 OR ^ENGL 381¹ - American Ethnic Literature (3),
 OR ENGL 399¹ - Topics in American Literature: Honors (3),
 OR ENGL 400¹ - Literary Topics (3),
 OR ENGL 499¹ - Topics in English Literature: Honors (3)
 ^ENGL 382 - Women Writers: The Tradition in English (3)
 ^ENGL 383 - Gay and Lesbian Literature (3)
 ^FLFR 445 - Feminism in France (3)
 ^FLSP 439 - Women Authors in Hispanic Literature (3)
 ^FLSP 445 - Latin American Women Writers (3)
 FLST 481¹ - Special Topics in Literature I (3)
 ^FMSD 464 - Social Psychology of Dress and Appearance (3)

* Available for general education credit.

[#] Fulfills the Human Diversity Requirement.

[^] This is a Writing Infused Course.

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.

HDFS 384 - Asian American Families (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)
 MGMT 498 - Equal Opportunity and Employment (3)
 NUTR 406 - Global Food and Nutrition Issues (3)
 ^PHHE 406 - Dimensions of Human Sexuality (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 357 - The Sociology of Gender (3)
 ^SOCI 450 - Social Inequality (3)
 ^SOCI 487 - Gender and Crime (3)
 WGSS 240 - Issues in Women's and Gender Studies (3)
 *WGSS 324/*BIOS 324X/*GEOG 324X - Women in Science (3)
 *WGSS 332 - Growing Up Girl (3)
 ^WGSS 350 - Lesbian, Gay, Bisexual, and Transgender Studies (3)
 WGSS 390 - Internship in Women's and Gender Studies (1-3)
 WGSS 424 - Topics in Gender and STEM (3)
 WGSS 430 - Special Topics in Women's and Gender Studies (3)
 WGSS 432 - Feminist and Queer Theories (3)
 *WGSS 434/ENGL 434X - Language and Gender (3)
 *WGSS 435 - Gender and the Environment (3)
 WGSS 436 - Current Debates Seminar: Women and Gender (3)
 WGSS 439 - Independent Study in Women's and Gender Studies (3)
 WGSS 450 - Transgender 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)
 ^ARTH 310H - Studies in Ancient and Middle Eastern Art: Islamic Art (3)
 ^ARTH 320 - Studies in Medieval Art (3)
 ^ARTH 330A - Studies in Early Modern European Art: Early Italian Renaissance Art (3)
 OR ^ARTH 330B - Studies in Early Modern European Art: Early Northern Renaissance Art (3)
 ^ARTH 452 - Topics in Medieval Art (3)
 ^ARTH 453 - Topics in Early Modern European Art (3)
 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 - Beginning Latin I and II (3, 3)
 FLCL 201 - Intermediate Latin I (3)
 *FLCL 271 - Classical Mythology (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 - History of the Western World I: Problems in the Human Past (3)
 ^HIST 304 - Late Antiquity and the Fall of Rome (3)
 ^HIST 305 - Early Middle Ages (3)
 ^HIST 306 - Later Middle Ages (3)
 HIST 319 - The Early Islamic World (3)
 *HIST 323 - History of Science to Newton (3)
 ^HIST 407 - Medieval Women (3)
 ^HIST 408 - Medieval Everyday Life (3)
 HIST 420 - The Renaissance (3)
 HIST 491B - 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 390³ - Topics in Philosophy (3)
 PHIL 421³ - Major Philosophers (3)
 PHIL 423 - Medieval Philosophy (3)
 POLS 350 - Classical and Medieval Political Theory (3)
 ^*THEA 370 - History of Theatre and Drama I (3)

Certificates of Undergraduate Study

Asian American Studies (12)

Coordinator: Florensia F. Surjadi (School of Family and Consumer Sciences)

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 grade 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 pursuing the certificate should meet with the coordinator for this certificate of undergraduate study early in their program of study.

Requirements

Two of the following (6)
 **ANTH 302 - Asian American Cultures (3)
 *HDFS 384 - Asian American Families (3)
 HIST 378 - Asian-American History (3)
 *HIST 470 - America and Asia (3)
 Two of the following (6)
 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)
 ART 489⁴ - Topics in Art: Authentic and Alternative Practices in Asian Art (3)
 ARTH 294 - Introduction to Arts of the East (3)
 ^ARTH 370A - Studies in Asian Art: Chinese Art (3)
 OR ^ARTH 370B - Studies in Asian Art: Japanese Art (3)
 OR ^ARTH 370C - Studies in Asian Art: South and Southeast Asian Art
 OR ^ARTH 370D - Studies in Asian Art: Southeast Asian Art (3)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

¹ May be counted toward the minor when topic is appropriate.

³ For relevant topics only by permission of Medieval Studies Coordinator

⁴ May be repeated and counted toward the certificate for up to 3 semester hours.

^ARTH 457 - Topics in Asian Art (3)
 ^ENGL 335⁵ - Non-Western and Third-World Literature (3)
 ^ENGL 381⁵ - American Ethnic Literature (3)
 ^ENGL 474⁵ - The International Short Story (3)
 *ENGL 477⁵ - Postcolonial and New Literatures in English (3)
 EPFE 430⁵ - Comparative and International Education (3)
 GEOG 338 - Geography of Asia (3)
 *HIST 346 - Women in Asian History (3)
 MUHL 431 - Music of Southeast Asia (3)
 MUHL 432 - Music of China (3)
 MUSE 370⁴ - Gamelan (1)
 MUSE 375⁴ - Chinese Music Ensemble (1)
 ^NUTR 406⁵ - Global Food and Nutrition Issues (3)
 NUTR 424⁵ - Cultural and National Food Patterns (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 an Asian language with approval of the coordinator (3)
 An independent study course on an Asian or Asian American topic,
 with approval of coordinator (3)

Film and Television Studies (15)

This interdisciplinary certificate is intended to provide a broad background in the area of media literacy and critical thinking. The certificate is designed to complement undergraduate course work in a variety of majors. The certificate is particularly appropriate for students preparing for, or currently working in, a variety of disciplines or careers in media production, broadcasting, public relations, marketing, advertising, visual arts, critical studies, politics, and literature.

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.

In addition to the approved elective courses listed below, any undergraduate-level special topics course focusing on film or television studies may be counted toward the certificate with the approval of the coordinator of the Film and Television Studies Certificate of Undergraduate Study. No transfer credit is allowed for the certificate. Students pursuing a certificate in Film and Television Studies should meet with the certificate director in the Department of Communication early in their academic careers.

Requirements (15)

COMS 356 - Critical Interpretation of Film/Television (3)
 ^ENGL 363 - Literature and Film (3)
 Three of the following from two different departments (9)
 COMS 390 - Major Directors (3)
 COMS 456C - History of Film (3)
 COMS 456D - History of Film (3)
 COMS 457 - The Documentary Tradition (3)
 COMS 459/JOUR 459X - History of Broadcasting (3)
 COMS 460 - Television Theory and Criticism (3)
 COMS 462 - Film Theory and Criticism (3)
 ^COMS 466 - Narrative Scriptwriting (3)
 COMS 493^{2,3} - Special Topics in Media Studies (3)
 ENGL 400^{2,3} - Literacy Topics (3)
 **HIST 383 - Latin America through Film (3)
 HIST 390² - Film and History (3)
 POLS 306 - The Mass Media in American Politics (3)
 POLS 312 - Law and Film (3)
 POLS 392 - Politics and Film (3)

Lesbian, Gay, Bisexual, Transgender, and Queer+ Studies (12)

Coordinator: Kristen Myers (Center for the Study of Women, Gender, and Sexuality)

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.

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 (12)

^*WGSS 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 410 - Communication and Gender (3)
 ^ENGL 383 - Gay and Lesbian Literature (3)
 ENGL 400¹ - Literary Topics (3)
 *HIST 367 - U.S. LGBT History (3)
 *HIST 402 - Gender and Sexuality in History (3)
 PSYC 474 - Psychological Basis of Sexuality (3)
 SCL 100 - Foundation of Social Change Leadership (3)
 SCL 200 - Application of Social Change Leadership (3)
 SOC 357 - Sociology of Gender (3)
 *WGSS 101 - Women, Sex, and Gender Today (3)
 *WGSS 202 - Women and Cultural Expression (3)
 WGSS 300 - Research Methods in Women, Gender, and Sexuality Studies (4)
 WGSS 390 - Internship in Women, Gender, and Sexuality Studies (1-3)
 WGSS 430¹ - Special Topics in Women's and Gender Studies (3)
 WGSS 432 - Feminist and Queer Theories (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.

[^] This is a Writing Infused Course.

^{*} Fulfills the Human Diversity Requirement.

¹ May be counted toward the certificate when topic is appropriate.

² May be repeated with change of topic up to 6 semester hours.

³ Topic must deal with television or film.

⁴ May be repeated and counted toward the certificate for up to 3 semester hours.

⁵ When a substantial part of the course is devoted to Asian or Asian American topics, with approval of the coordinator.

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 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)
- ^ARTH 451 - Topics in Ancient and Middle-Eastern Art (3)
- ^ARTH 452 - Topics in Medieval Art (3)
- ^ARTH 453 - Topics in Early Modern European Art (3)
- ^ARTH 457 - Topics in Asian Art (3)
- ^ARTH 458 - Topics in African, Oceanian, Native American, Pre-Columbian Art, and Latin-American Art (3)

Women's and Gender Studies

Coordinator: Kristen Myers (Center for the Study of Women, Gender and Sexuality)

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.

All requirements for the certificate must be completed within a period of six consecutive years.

Requirements (12)

Two of the following courses (6)

- *WGSS 101 - Introduction to Women, Gender, and Sexuality Studies (3)
- WGSS 201 - Global Gender Issues (3)

Two of the following courses in any field, focused on women and/or gender (6)

- 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)
- *COMS 410 - Communication and Gender (3)
- ENGL 309 - Popular Genres (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/*WGSS 434 - Language and Gender (3)

^FLFR 445 - Feminism in France (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)

*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)

SCL 100 - Foundation of Social Change Leadership (3)

SCL 200 - Application of Social Change Leadership (3)

*SOCI 354 - Families and Social Change (3)

SOCI 357 - The Sociology of Gender (3)

^SOCI 450 - Social Inequality (3)

^SOCI 487 - Gender and Crime (3)

*WGSS 202 - Women and Cultural Expression (3)

WGSS 240 - Issues in Women, Gender, and Sexuality Studies (3)

WGSS 300 - Research Methods in Women, Gender, and Sexuality Studies (4)

*WGSS 324/*BIOS 324X/*GEOG 324X - Women in Science (3)

*WGSS 332 - Growing Up Girl (3)

WGSS 390 - Internship in Women, Gender, and Sexuality Studies (1-3)

WGSS 424 - Topics in Gender and STEM (3)

WGSS 430 - Special Topics in Women, Gender, and Sexuality Studies (3)

WGSS 432 - Feminist and Queer Theories (3)

*WGSS 435/ENVS 435X - Gender and the Environment (3)

WGSS 436 - Current Debates Seminar: Women, Gender, and Sexuality Studies (3)

WGSS 439 - Independent Study in Women, Gender, and Sexuality Studies (3)

* Available for general education credit.

^ Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

¹ May be counted toward the certificate when topic is appropriate.

Course Selection

In addition to completing a college major, many students find it beneficial in their future careers and other lifetime activities to have completed a program of study which broadens their knowledge and experience in a cohesive way. This objective can be achieved by a careful and informed choice of general education and elective courses.

For example, by carefully selecting the courses taken to fulfill the requirements of the General Education Program, students can discover their interests and abilities and thereby identify appropriate educational goals or, if these goals have already been decided, seriously test their suitability. In addition, an informed selection of courses taken to fulfill the requirements of the General Education Program can develop into a minor or even a second major area of study.

Students majoring in a degree program in the College of Liberal Arts and Sciences may have as many as 42 hours of elective courses, depending on their particular majors. The choice of courses taken to fill these elective hours is among the most important decisions a student will make while at NIU.

Students are strongly encouraged to use these hours to complete a minor area of study. Students with a major in the College of Liberal Arts and Sciences should use the offerings of the college as well as those of other colleges in the university in designing suitable programs of study—ones that will reinforce their intellectual and professional goals.

The college's Advising and Counseling Office is available to students in need of advice and assistance.

Pre-professional Studies

Professional schools such as those offering degrees in dentistry, law, and medicine usually require specific courses and/or an undergraduate degree from an accredited college or university for admission to their professional programs. Students interested in applying for admission into such programs are advised by the Advising and Counseling Office of the college and should register their interest in such programs with this office at the earliest possible date.

Admission to professional schools generally is highly competitive, with the number of qualified applicants far exceeding the number of students that can be admitted. A great deal of information is required by the admissions committees. Many professional schools require applicants to take special standardized tests, such as the Law School Admission Test (LSAT), the Medical College Admission Test (MCAT), and the Dental Aptitude Test (DAT), to measure the performance of applicants against national standards. Some professional schools use national application services (e.g., the Law School Data Assembly Service) to standardize the materials they are reviewing. Therefore, the application process is complex and time-consuming. To assist applicants, the Advising and Counseling Office has available detailed guidelines for completing each type of professional school application.

The Advising and Counseling Office also operates a recommendation service for applicants to professional schools. Applicants who use this service receive recommendation forms to be submitted to faculty members and others who can speak of their qualifications for professional study. These recommendations are submitted to the Advising and Counseling Office. They are sent to professional schools at the student's request. Students are encouraged to request these recommendations early, so that their performance will still be fresh in the minds of the persons writing the recommendations. Students may begin collecting recommendations as early as they deem appropriate, regardless of when they begin to apply to professional schools.

A pre-professional association for students interested in medically related fields has been active on campus for several years. This association sponsors a variety of informational programs throughout the year for tentative and declared pre-professional students in medically related areas. A similar group has been organized for pre-law students. Information about both of these organizations is available in the Advising and Counseling Office.

Degree 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, 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)
 MGMT 217 - Legal Environment of Business (3)
 MGMT 438 - Human Resource Planning and Staffing (3)
 PHIL 103 - Contemporary Issues in Ethics (3)
 PHIL 105 - Logic and Critical Reasoning (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 200), 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, PSYC 225, STAT 200, 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 200 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).

^ This is a Writing Infused Course.

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 World Languages and Cultures 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 Communities. 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)**

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 secondary school teachers. Designed to provide an overview of teaching as a profession and of contemporary issues in public schools. Includes a minimum of 30 clock hours of supervised and formally evaluated participation in a variety of settings within the placement schools, and seminars on relevant topics. 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 (1). Discipline-based clinical experiences for prospective secondary school teachers. Focus on practical application of relevant educational theories. Includes a minimum of 30 clock hours of supervised and formally evaluated participation in placement school settings, and seminars on 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.

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.

Latino/Latin American Studies (LATS)

100. INTRODUCTION TO LATIN AMERICAN STUDIES (3). Introduction to the interdisciplinary field of Latin American studies. Latin America and the Caribbean from the colonial period through the present day with focus on the political, cultural, social, economic, and geographic differences and commonalities that have shaped the region. Emphasis will be on changes and continuities in everyday life, including the role of race, ethnicity, and gender in society.

101. INTRODUCTION TO LATINO STUDIES (3). Introduction to the interdisciplinary field of Latino Studies. Exploration of the history, culture, and experiences of Latinos in the United States in the 19th and 20th centuries with emphasis on immigration and migration; colonialism and imperialism; community formation; labor markets; race and racial formations; gender and sexuality; political activism; religion; and popular culture.

400. SPECIAL TOPICS IN LATINO AND LATIN AMERICAN STUDIES (3). Selected themes or problems. Topics announced. May be repeated when subject 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, Gender, and Sexuality Studies (WGSS)

101. INTRODUCTION TO WOMEN, GENDER, AND SEXUALITY STUDIES (3). Introduction to the study of women, gender, and sexuality in the contemporary U.S., with an emphasis on diversity, feminisms, LGBT+ communities, and social change.

201. GLOBAL GENDER ISSUES(3). Introduction to how gender, power and sexual orientation influence access to resources globally, as well as gendered experiences and livelihood strategies in different societies around the world.

202. WOMEN AND CULTURAL EXPRESSION (3). Explores women and their roles as producers of and subjects in various cultural expressions in the U.S. and other societies. Culture includes visual and performing arts, literature, film, and other expressions throughout history.

240. ISSUES IN WOMEN, GENDER, AND SEXUALITY STUDIES (3). Interdisciplinary introduction to selected problems and issues in women's and gender studies. May be repeated to a maximum of 6 semester hours as topic changes.

300. RESEARCH METHODS IN WOMEN, GENDER, AND SEXUALITY STUDIES (4). Overview of research methodologies used in feminist and queer research and artistry. Includes hands-on training in data collection and analysis techniques. Required for WGSS majors. Open to WGSS and LGBTQ+ Studies minors. PRQ: WGSS 101; WGSS major; WGSS minor or LGBTQ+ Studies minor with consent of the director or program adviser for the Center for the Study of Women, Gender, and Sexuality.

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 GIRL (3). Examination of the experience of growing up as a girl from an interdisciplinary perspective, with attention to differences and similarities in ethnicity, race, gender identity, class, and sexual orientation. Theories and research on identity 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, WGSS 101, or WGSS 202; or consent of director.

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.

390. INTERNSHIP IN WOMEN, GENDER, AND SEXUALITY STUDIES (1-3). Work as an intern in activities related to women's and gender 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 AND GENDER 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 AND QUEER THEORIES (3). Ideas, histories, concepts, and concerns of feminist and queer theories. Identity categories and their historical construction, cultural contexts, significance for contemporary power relations, and meanings for diverse individuals and communities. Intersectional understandings of gender and sexuality as constituted by and constitutive of race, class, ability, and other dimensions of difference, privilege, and disadvantage. PRQ: WGSS 101 or WGSS 201 or WGSS 202 or WGSS 350; 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.

435. GENDER AND THE ENVIRONMENT (3). *Crosslisted as ENVS 435X.* Topics and issues pertaining to gender and the environment such as the role of gender and other social factors in perceptions, knowledge, and behaviors regarding the environment today and in the past; women's contributions to environmental arts and sciences; the role of gender in environmental activism and policy in the U.S. and around the globe.

436. CURRENT DEBATES SEMINAR: WOMEN, GENDER, AND SEXUALITY STUDIES (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, GENDER, AND SEXUALITY STUDIES (3). Independent research on an approved topic in women's and gender 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 WGSS 101 and WGSS 202.¹

450. TRANSGENDER STUDIES (3). Examines the T in LGBT Studies from an interdisciplinary framework, addressing multiple issues including trans identities, bodies, and rights.

499. WGSS CAPSTONE (3). Synthesis, integration, and application of the concepts, histories, research, ideas, and debates that drive the field of Women, Gender, and Sexuality Studies. Framework for applied capstone project and completion of WGSS ePortfolio (required for WGSS majors). Open to WGST and LGBTQ+ Studies minors. PRQ: WGSS 101; WGSS major; senior standing; WGST minor or LGBTQ+ Studies minor with consent of the director or program adviser for the Center for the Study of Women, Gender, and Sexuality.

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 Center for the Study of Women, Gender and Sexuality 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 Economics, Department of Political Science (POLS), Department of Public Administration (PSPA), Center for Nonprofit and NGO Studies (NNGO) (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.

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 (1) students holding an A.A.S. in a discipline directly related to one of the program emphases, or students holding an A.A./A.S. degree, and (2) who can demonstrate that they have significant professional experience related to one of the program emphases. Admission will be determined by the appropriate program emphasis faculty. All majors must meet NIU's requirements for general education (21-33 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.

B.S. in Applied Management Degree Completion Program

The B.S. in applied management degree completion program is designed to award credit to practicing professionals for their recent education and previous learning experiences in the relevant fields of public sector employment. In addition to the course requirements outlined below, up to 30 semester hours of credit may be awarded for documented prior learning through professional experiences and education in an area related to the emphasis. Students interested in the B.S. in applied management degree completion program should contact a program adviser for a preadmission interview and course counseling session.

Proficiency Credit

Up to 30 hours of proficiency credit may be applied toward the 120-credit hour university requirement. The number of credits awarded will be based on the evaluation of the professional portfolio, submitted at the completion of SPGA 490, by a panel of faculty in the emphasis area. These credits will be applied to the student's transcript upon appropriate approval at the departmental and college levels, and the completion of all designated 300- and 400-level course work for the applied management degree.

B.S.A.M. Core Requirements (21)

The following core requirements are designed to address core competencies related to program learning outcomes for the B.S.A.M. public service emphasis. Students should select courses that are most appropriate for their B.S.A.M. emphasis in consultation with an adviser.

ACCY 288 - Fundamentals of Accounting (3)
 POLS 330/PSPA 330X - Bureaucracy and the Public Policy Process (3)
 POLS 331/PSPA 331X - Public Administration (3)
 OR *COMS 362 - Intercultural Communication (3)
 POLS 340 - Political Analysis (3)
 OR NNGO 390 - Introduction to Research in Non-Governmental and Nonprofit Organizations (3)
 OR *STAT 100 - Basic Statistics (3)
 PSPA 320 - Public Service Leadership (3)
 PSPA 411 - The Ethical Public Administrator (3)
 SOCI 375 - Sociology of Organizations (3)

Emphasis in Public Service (19)

Required Courses (19)

PSPA 332 - Strategic Performance Management of Public Service Organizations (3)
 PSPA 412 - Public Budgeting (3)
 SPGA 480 - Capstone (3)
 SPGA 490 - Professional Portfolio Assessment (1)
 At least one of the following:
 POLS 303/PSPA 303X - State and Local Government (3)
 PSPA 410 - Supervision in the Public Sector (3)
 PSPA 413 - Community Engagement in Public Service Agencies (3)

At least 6 credits of 300-400 level course work in a relevant discipline, selected in consultation with a program adviser.

Total hours for Emphasis in Public Service: 40

Course List (SPGA)

480. CAPSTONE (3). Designed to integrate and apply public service theories to a problem or issue in a public service organization. PRQ: Consent of department.

490. PROFESSIONAL PORTFOLIO ASSESSMENT (1). Introduction to adult learning theory and the process of producing a prior learning assessment portfolio of workplace learning (learning outside of the college classroom). The prior learning portfolio will be used to determine the amount of proficiency credit awarded. Must be taken in the first year. S/U grading. PRQ: Admission to the Bachelor of Science in Applied Management program in Public Service and permission of the emphasis faculty.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

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. Students choose one of four emphasis areas that include A) Social Complexity and Inequality, B) Environment and Evolution, C) Language, Culture, and Mind, or D) General Anthropology. The department also offers a minor in anthropology, which should be of special interest to students in art history, biological sciences, business management, world languages and cultures, 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, and women's and gender 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 - Becoming Human: Discovering Human Origins (3)
- At least one 300- or 400-level course in each of the following categories (12-13)
 - Archaeology
 - Cultural anthropology
 - Linguistic anthropology
 - Physical anthropology
- Four additional courses, all selected from one of the four emphasis areas. (12)
 - (A) Social Complexity and Inequality
 - ANTH 301 - American Culture (3)
 - 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 313 - Archaeology Through Fiction (3)
 - *ANTH 326X - Survey of World Music (3)
 - ANTH 328 - Anthropology of Religion (3)
 - ANTH 329 - Anthropology and Contemporary World Problems (3)
 - ANTH 331 - Language and Culture (3)
 - ANTH 361 - Cross-Cultural Perspectives on Women (3)
 - ANTH 363 - Globalization and Corporate Cultures (3)
 - ANTH 404 - Peoples and Cultures of the Caribbean (3)
 - ANTH 407 - Peoples and Cultures of Insular Southeast Asia (3)
 - ANTH 408 - Peoples and Cultures of Mainland Southeast Asia (3)
 - ANTH 409 - Cultures and Societies of the Middle East (3)
 - ANTH 413 - Illinois Archaeology (3)
 - ANTH 414 - Archaeology of Mesoamerica (3)
 - ANTH 415 - Archaeology of the American Southwest (3)
 - ANTH 417 - Archaeology of South America (3)
 - ANTH 421 - Social Organization (3)

- ANTH 422 - Gender in Southeast Asia (3)
- ANTH 424 - Anthropology of Peace and Conflict Resolution (3)
- ANTH 426 - Political Anthropology (3)
- ANTH 427 - Economic Anthropology (3)
- ANTH 429X - International NGOs and Globalization (3)
- ANTH 441 - Sex and Gender in Primates (3)
- ANTH 466/ENVS 466X - Resource Conflicts and Environmental Peace Building (3)
- ANTH 468 - Anthropology of Gender (3)
- ANTH 469 - Archaeology of Empires (3)
- ANTH 490 - Anthropological Research Training (3-6) with approval from the departmental adviser
- ANTH 491 - Current Topics in Anthropology (3-9) with approval from the departmental adviser
- ANTH 493 - Anthropology Field Study (1-6) with approval from the departmental adviser
- ANTH 498 - Independent Study in Anthropology (1-6) with approval from the departmental adviser
- (B) Environment and Evolution
 - ANTH 310 - The Archaeology of Oceania and Southeast Asia (3)
 - ANTH 313 - Archaeology Through Fiction (3)
 - ANTH 341 - Primatology (3)
 - ANTH 343 - Extinction: Where the Wild Things Were (3)
 - ANTH 412 - Ancient North America (3)
 - ANTH 413 - Illinois Archaeology (3)
 - ANTH 414 - Archaeology of Mesoamerica (3)
 - ANTH 415 - Archaeology of the American Southwest (3)
 - ANTH 416 - Human Migration (3)
 - ANTH 417 - Archaeology of South America (3)
 - ANTH 420/ENVS 420X - Waterworlds (3)
 - ANTH 423 - Environmental Anthropology of the Middle East: Cultural and Political Ecologies (3)
 - ANTH 425 - Environment and Anthropology (3)
 - ANTH 432 - Nature and the Environment Across Cultures (3)
 - ANTH 440 - Fossil Humans (3)
 - ANTH 441 - Sex and Gender in Primates (3)
 - ANTH 443 - Human Adaptation and Variation (3)
 - ANTH 444 - Primate Ecology and Conservation (3)
 - ANTH 445 - Primate Evolution (3)
 - ANTH 447 - Primate Anatomy (3)
 - ANTH 454 - Uses and Abuses of Evolutionary Theory (3)
 - ANTH 464 - Disasters without Borders (3)
 - ANTH 466/ENVS 466X - Resource Conflicts and Environmental Peace Building (3)
 - ANTH 490 - Anthropological Research Training (3-6) with approval from the departmental advisor
 - ANTH 491 - Current Topics in Anthropology (3-9) with approval from the departmental adviser
 - ANTH 493 - Anthropology Field Study (1-6) with approval from the departmental adviser
 - ANTH 498 - Independent Study in Anthropology (1-6) with approval from the departmental adviser
- (C) Language, Culture, and Mind
 - ANTH 331 - Language and Culture (3)
 - ANTH 421 - Social Organization (3)
 - ANTH 425 - Environment and Anthropology (3)
 - ANTH 432 - Nature and Environment Across Cultures (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 454 - Uses and Abuses of Evolutionary Theory (3)
 - ANTH 460 - Methods in Ethnography (3)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

ANTH 466/ENVS 466X - Resource Conflicts and Environmental Peace Building (3)
 ANTH 467 - Applied Anthropology (3)
 ANTH 468 - Anthropology of Gender (3)
 ANTH 490 - Anthropological Research Training (3-6) with approval from the departmental adviser
 ANTH 491 - Current Topics in Anthropology (3-9) with approval from the departmental adviser
 ANTH 493 - Anthropology Field Study (1-6) with approval from the departmental adviser
 ANTH 498 - Independent Study in Anthropology (1-6) with approval from the departmental adviser
 ILAS 261 - Language, Mind, and Thought (3)

(D) General Anthropology

ANTH 301 - American Culture (3)
 ANTH 302 - Asian American Cultures (3)
 ANTH 304 - Muslim Cultures in Anthropological Perspective (3)
 ANTH 313 - Archaeology Through Fiction (3)
 *ANTH 326X - Survey of World Music (3)
 ANTH 328 - Anthropology of Religion (3)
 ANTH 329 - Anthropology and Contemporary World Problems (3)
 ANTH 331 - Language and Culture (3)
 ANTH 341 - Primatology (3)
 ANTH 343 - Extinction: Where the Wild Things Were (3)
 ANTH 361 - Cross-Cultural Perspectives on Women (3)
 ANTH 363 - Globalization and Corporate Cultures (3)
 ANTH 404 - Peoples and Cultures of the Caribbean (3)
 ANTH 407 - Peoples and Cultures of Insular Southeast Asia (3)
 ANTH 408 - Peoples and Cultures of Mainland Southeast Asia (3)
 ANTH 409 - Cultures and Societies of the Middle East (3)
 ANTH 412 - Ancient North America (3)
 ANTH 413 - Illinois Archaeology (3)
 ANTH 414 - Archaeology of Mesoamerica (3)
 ANTH 415 - Archaeology of the American Southwest (3)
 ANTH 417 - Archaeology of South America (3)
 ANTH 418 - Applied Archaeology (3)
 ANTH 420/ENVS 420X - Waterworlds (3)
 ANTH 421 - Social Organization (3)
 ANTH 422 - Gender in Southeast Asia (3)
 ANTH 423 - Environmental Anthropology of the Middle East: Cultural and Political Ecologies (3)
 ANTH 424 - Anthropology of Peace and Conflict Resolution (3)
 ANTH 425 - Environment and Anthropology (3)
 ANTH 426 - Political Anthropology (3)
 ANTH 427 - Economic Anthropology (3)
 ANTH 428 - Ritual and Myth (3)
 ANTH 429X - International NGOs and Globalization (3)
 ANTH 432 - Nature and Environment Across Cultures (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 440 - Fossil Humans (3)
 ANTH 441 - Sex and Gender in Primates (3)
 ANTH 443 - Human Adaptation and Variation (3)
 ANTH 444 - Primate Ecology and Conservation (3)
 ANTH 445 - Primate Evolution (3)
 ANTH 446 - The Human Skeleton (3)
 ANTH 447 - Primate Anatomy (3)
 ANTH 450 - Ethics and Research Design in Anthropology (3)
 ANTH 451 - History and Theory of Anthropology (3)
 ANTH 453 - Archaeological Theory (3)
 ANTH 454 - Uses and Abuses of Evolutionary Theory (3)
 ANTH 460 - Methods in Ethnography (3)
 ANTH 461 - Methods in Archaeology (3)
 ANTH 462 - Collections Management (3)
 ANTH 463 - Ethnohistory (3)
 ANTH 464 - Disasters Without Borders (3)
 ANTH 466/ENVS 466X - Resource Conflicts and Environmental Peace Building (3)
 ANTH 468 - Anthropology of Gender (3)
 ANTH 469 - Archaeology of Empires (3)

ANTH 490 - Anthropological Research Training (3-6) with approval from the departmental adviser
 ANTH 491 - Current Topics in Anthropology (3-9) with approval from the departmental adviser
 ANTH 493 - Anthropology Field Study (1-6) with approval from the departmental adviser
 ANTH 498 - Independent Study in Anthropology (1-6) with approval from the departmental adviser
 ILAS 261 - Language, Mind, and Thought (3)

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.

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 Educator Licensure 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 History and Social Sciences Educator Licensure Program when they have:

established a file with the History and Social Sciences Educator Licensure 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 2.67;

passed the Test of Academic Proficiency or equivalent recognized by the ISBE;

completed at least 6 semester hours of anthropology at NIU and earned a minimum GPA of 3.00 in all anthropology courses taken at NIU;

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 Educator Licensure Program.

* Available for general education credit.

* Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

Retention

Students admitted to the program must maintain program GPA requirements, display appropriate professional dispositions, and complete a satisfactory review of progress each semester with the History and Social Sciences Educator Licensure Program. Students must also pass any additional tests required by the ISBE for educator licensure such as the appropriate state Content Area Test (taken before student teaching) and the Teacher Performance Assessment (taken before program completion).

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 and concurrently with the Third Clinical Secondary School Experience in History/Social Sciences.

Other Requirements

Students pursuing educator licensure must take additional, approved course work in history and the social sciences to acquire the broad-based, interdisciplinary knowledge required of secondary social studies educators. Students must also complete approved professional education course work in areas such as special education methods, content-area literacy, and teaching English-language learners. Contact the History and Social Sciences Educator Licensure Program for the current list of history, social science, and education courses approved for fulfilling these requirements.

Students must also complete a three-semester sequence of pre-student teaching clinical experiences, including HIST 401, Third Clinical Secondary School Experience in History/Social Sciences, as well as 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.

Students pursuing 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.

The History and Social Sciences Educator Licensure 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 Educator Licensure Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Educator Licensure 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 - Becoming Human: Discovering Human Origins (3)

Four additional courses in anthropology at the 200 level or above in consultation with a faculty adviser.

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 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
- 70 through –79: Archaeology
- 90 through –99: General

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.

103. THE GREAT APES – OUR CLOSEST RELATIVES (3). Introduction to the Great Apes from the perspective of biological anthropology. Review of the anatomy, evolution, taxonomy, social organization, feeding ecology, evidence of culture and tool use, language skills, and conservation status of the chimpanzees, bonobos, gorillas and orangutans.

104. ANTHROPOLOGY OF POP CULTURE: MAKING THE FAMILIAR STRANGE (3). Examination of American popular culture as a widely-shared and contested set of beliefs, values, and practices embodied in a variety of topics such as consumerism, sports, race and ethnicity, poverty and social mobility, food systems, sex and sexual orientation, and globalization. All topics are critically examined in a crosscultural and/or cultural evolutionary anthropological context.

105. ARCHAEOLOGY MYTHS AND MYSTERIES (3). Examines how archaeologists study the remains of the past to understand prehistoric people and their lifeways. Develops methods for critically evaluating the archaeological records. Explores concepts characterizing science and pseudoscience to develop criteria for distinguishing the two.

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. BECOMING HUMAN: DISCOVERING HUMAN ORIGINS (3). Who are we, and where did we come from? An overview of the evolution of modern humans. Topics include human biology, human variation, basic principles of genetic inheritance, evolutionary history, living primates, and the human fossil record. Hands-on learning opportunities will provide experience in understanding scientific attempts to reconstruct our past.

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.

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.

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.

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.

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.

404. PEOPLES AND CULTURES OF THE CARIBBEAN (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.

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.

409. CULTURES AND SOCIETIES OF THE MIDDLE EAST (3). Studies the peoples and societies of the Middle East and North Africa from an anthropological perspective. Explores problems of crosscultural examination and the role of anthropology in the formation of the idea of the "Middle East" as an area of study. Examines and problematizes key themes commonly linked with the region, such as tribe and state, family and kinship, gender and sexuality, honor and shame, tradition and modernity, and religion and secularism. Includes ethnographies based on field work in the region, contemporary news reports, and films.

410. ENVIRONMENTAL ARCHAEOLOGY (3). Introduction to methods and theories relevant to analysis and interpretation of past human-environment interactions, by examination of historical and current theoretical literature. Emphases on outlining the kind of environmental data that survives in the archeological record (geological, botanical, faunal, chemical), recovery and analytical methods, and inferences made from these data to understand human-environment dynamics. Topical themes include the use of archeological sites as paleoenvironmental archives, plant and animal domestication, human impacts on ancient environments, and cultural collapse/resilience.

411. SETTLEMENT OF THE AMERICAS (3). Introduction to initial human settlement of the western hemisphere. Major themes include: chronology and migration routes of early settlement; important archeological sites in North, Central, and South America, environmental and landscape change, human impacts on environments, theories of human biogeography (migration and colonization), and current methods accelerating the pace of discoveries.

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.

416. HUMAN MIGRATION (3). Examines key events in human development and landscape evolution that led to successful migrations. Compares human migration episodes in different times and places, and discusses questions related to why humans move, environmental constraints and opportunities to human movement, hominid species similarities and differences with respect to inhabited ranges and migration patterns, and the role of evolution and technological development.

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.

420. WATERWORLDS (3). *Crosslisted as ENVS 420X*. Exploration of water as a resource under threat and as a window into social worlds. Using crosscultural case studies, concentrates on customs, tools, and ideologies for encountering, appreciating, and controlling water as well as solutions to water scarcity, pollution, and unjust distribution. Seminar-style includes interdisciplinary readings, films, and field trip(s).

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.

424. ANTHROPOLOGY OF PEACE AND CONFLICT RESOLUTION (3). Looks at the anthropological and crosscultural literature on peace and conflict, including the debate over human nature and innate tendencies toward aggression and violence. Critical discussions on a wide range of theories drawing on political anthropology, the state, globalization, ethnicity and identity for analyzing conflict, looking especially at the role of culture, religion and indigenous forms of dispute management.

425. ENVIRONMENT AND ANTHROPOLOGY (3). *Crosslisted as ENVS 425X*. 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 NNGO 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). *Crosslisted as ENVS 432X*. 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.
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).** *Crosslisted as ENVS 444X.* 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.
449. **PRIMATES AND FOOD (3).** Broad overview of primate nutritional ecology, examining both sides of an evolutionary process: how primate adaptations improve success in acquiring nutrients and how plant adaptations discourage or encourage herbivory. Studies the chemical properties of food as well as primates' anatomical, physiological, and behavioral adaptations to their food. Includes critical examination of dietary reconstructions in our own human ancestors, considering whether these are useful in understanding contemporary human dietary choices and adaptations.
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.
454. **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.
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 as NNGO 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. **RESOURCE CONFLICTS AND ENVIRONMENTAL PEACEBUILDING (3).** *Crosslisted as ENVS 466X.* Interdisciplinary examination of resource conflict and environmental peacebuilding through case studies around the world. Investigates how different material, geographical, and sociopolitical factors exacerbate conflicts and provide opportunities for peacebuilding. Course materials include ethnographic books, scholarly articles, news reports, and films.
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.

250 ANTHROPOLOGY

480. INTERNSHIP IN ANTHROPOLOGY (3). Supervised internship in anthropology-related field. Minimum of 120 work hours per semester plus final paper/project. Complete proposals must be submitted for departmental approval a minimum of two weeks before beginning of the semester. May be repeated to a maximum of 6 semester hours. S/U grading.

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 9 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 AND MIDDLE GRADES 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 middle grades and secondary levels. PRQ: Admission to the history or social science secondary or middle grades educator licensure program and permission of the Department of History's office of secondary educator licensure.

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

Leila Porter, Ph.D., Stony Brook University, professor, chair
Giovanni Bennardo, Ph.D., University of Illinois, Distinguished Research Professor
Kristen Borre, Ph.D., University of North Carolina, instructor
Mitchell Irwin, Ph.D., Stony Brook University, associate professor
Judy L. Ledgerwood, Ph.D., Cornell University, Presidential Engagement Professor
Emily McKee, Ph.D., University of Michigan, associate professor
Kerry Sagebiel, Ph.D., University of Arizona, instructor
Mark Schuller, Ph.D., University of California, associate professor
Kendall M. Thu, Ph.D., University of Iowa, Presidential Engagement 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 (33)

*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 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 (4),
 AND STAT 200 - Elementary Statistics (4)
 OR *MATH 229 - Calculus I (4) AND STAT 200 - 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: 79

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 200, 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

* Available for general education credit.

¹ There is a 50-semester-hour limit of biology courses whether or not they apply to the major.

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.

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 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 and Middle Level 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, Directed Research Biology Honors, or BIOS 499, Directed Research University Honors under a faculty member's supervision; 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.
- 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.

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 WGSS 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.

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.

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 9 semester hours. PRQ: At least a B average in biological sciences and permission of department. Collectively, a maximum of 9 semester hours of credit in BIOS 370, BIOS 490, BIOS 495 and BIOS 499, including no more than 3 semester hours from BIOS 490, may be applied to the major.

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 AND MIDDLE LEVEL EDUCATION (3). *Crosslisted as CHEM 493X, ENVS 483X, 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 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.

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 behaviors evolve. Practice in critical analysis, decision-making, and reasoning skills, such as weighing costs, benefits, and tradeoffs. Many key ideas apply not only to biology, but also to anthropology, economics, and psychology. PRQ: BIOS 209 or consent of department.

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.

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). Examines the developmental process that guide the transition of a fertilized embryo to an adult animal. Core topics include the basic patterns of embryonic development, establishment of the three germ layers, organogenesis, morphogenesis, tissue regeneration and mechanisms that control these processes at the cellular and molecular levels. Human developmental disorders will also be discussed in the context of these principles. PRQ: BIOS 302 and BIOS 303.

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.

459. HUMAN NEUROBIOLOGY (4). Basic organization of the central nervous system, with emphasis on the neural systems in the brain and spinal cord that mediate sensation, motivate bodily action, and integrate sensorimotor signals with memory as well as pathways and diseases affecting the the central nervous system. In the laboratory, students will have the opportunity to dissect a human brain. PRQ: BIOS 355 or BIOS 357.

461. ENDOCRINOLOGY (3). Investigation of endocrine systems through a comparative systems approach. Concepts include coordination of physiological processes, cellular and molecular mechanisms of hormonal action, and evolution of hormonal regulation. Lecture material and readings from the current professional literature. Competencies include creative problem solving, modeling and simulating systems, interdisciplinary communication, experimental design and critique, and teamwork. PRQ: BIOS 355 ; or BIOS 302 and BIOS 303

462. BIOGEOGRAPHY (3). *Crosslisted as GEOG 462X*. 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.

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, ENVS 475X, 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.

489. MADAGASCAR FIELD BIOLOGY (6). Field biology experience devoted to studying the paleontology, evolution, ecology and behavior of the fauna native to the island of Madagascar. Includes lectures, museum field trips, and hands-on experience at a rainforest field camp. Independent research projects, data collection, and results presentation in a research talk and final report. PRQ: BIOS 209 and BIOS 211.

490'. 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. 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 490, BIOS 495, and BIOS 499 may be applied to the major.

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. 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. 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.

499. 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. 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
 Heather Bergan-Roller, Ph.D., University of Nebraska at Lincoln, assistant professor
 Neil W. Blackstone, Ph.D., Yale University, professor
 Jozef J. Bujarski, Ph.D., Adam Mickiewicz University (Poznan, Poland), Distinguished Research Professor
 Ana Calvo, Ph.D., University of Alcala (Madrid), Distinguished Teaching Professor
 Olivier Devergne, Ph.D., Princeton University, assistant professor
 Melvin Duvall, Ph.D., University of Minnesota, St. Paul, professor
 Holly Jones, Ph.D., Yale University, associate professor
 Bethia H. King, Ph.D., Purdue University, professor
 Richard B. King, Ph.D., Purdue University, Distinguished Research Professor
 Jon Miller, Ph.D., University of Nebraska at Lincoln, Presidential Engagement Professor
 Virginia L. Naples, Ph.D., University of Massachusetts, professor
 Karen Samonds, Ph.D., State University of New York, Stony Brook, associate professor
 Pallavi Singh, M.Sc., Ph.D., Michigan State University, assistant professor
 Wes Swingley, Ph.D., Arizona State University, associate professor
 Ronald Toth, Ph.D., University of Massachusetts, adjunct professor
 Linda Yasui, Ph.D., Florida State University, associate professor
 Shengde Zhou, Ph.D., Auburn University, associate professor

Department of Chemistry and Biochemistry (CHEM)

The Department of Chemistry and Biochemistry offers a major leading to the B.S. degree with a choice of five different emphases, each of which requires courses in calculus, physics, and certain core courses in chemistry. Students who intend to pursue advanced degrees in chemistry or biochemistry, or who are planning careers as professional chemists or biochemists, should select emphasis 1 or emphasis 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 - Research (2),
 OR CHEM 499 - Honors Research (2)
 Electives chosen with the advice of the chemistry faculty from 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: Personal World and Beginning German II: The German-Speaking World (6),
 OR FLRU 101 and FLRU 102 - Beginning 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 200 - Elementary Statistics (4),
 OR STAT 300 - 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 - Research (2),
 OR CHEM 499 - Honors 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

* Available for general education credit.

^ This is a Writing Infused Course.

Recommendations

Students are encouraged to take at least one of the following:

- CHEM 462 - Inorganic Chemistry of the Main Group Elements (3),
- 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 200 - Elementary Statistics (4),
- OR STAT 300 - 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 licensure should consult with the discipline coordinator as early as possible to make certain they meet licensure 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 338 - Organic Chemistry Laboratory I (1)
- CHEM 337 - Organic Chemistry II (3), and CHEM 339 - 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 and Middle Level 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 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 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)
- 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 - Planet Earth (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) AND CHEM 338 - Organic Chemistry Laboratory I (1) AND CHEM 339 - Organic Chemistry Laboratory II (1),
- OR CHEM 330 - General Organic Chemistry I (3) AND CHEM 331 - General Organic Chemistry II (3) AND CHEM 332 - General Organic Laboratory I (1) AND CHEM 333 - General Organic Laboratory II (1)
- CHEM 440 - Physical Chemistry I (3)
- ^CHEM 442 - Physical Chemistry Laboratory I (1)
- CHEM 470 - General Biological Chemistry (3), and electives chosen from 400-level classes excluding classes numbered 490 to 497 (6-7),
- OR CHEM 472 AND CHEM 473 - Biological Chemistry I and II (6) and electives chosen from 400-level classes excluding classes numbered 490 to 497 (3-4)
- No more than 3 semester hours of CHEM 498/CHEM 499 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 must 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 licensure and/or endorsement with or without becoming a candidate for a degree, should apply for admission to the director of chemistry licensure 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 director in the Department of Chemistry and Biochemistry and completed satisfactory reviews of progress each semester after establishment of the file,
- attained junior standing,

* Available for general education credit.

^ This is a Writing Infused Course.

¹ Successful completion of the course of study for emphasis 4 fulfills the requirements for a minor in biological sciences.

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

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;

take and pass the ILTS Chemistry Content Test prior to applying to student teaching; and,

take and pass Teacher Performance Assessment (edTPA) before completion of the program.

General Requirements and Information

The program of courses for meeting licensure requirements must be approved by the discipline director 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 edTPA, and demonstration that the candidate has met teaching standards for the chemistry teacher.

Contact the discipline director 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)

No more than 3 credits of CHEM 498/499 may be applied toward the Minor in Chemistry.

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.

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.

310. INTRODUCTORY ORGANIC AND BIOLOGICAL CHEMISTRY (3). Beginning organic and biological chemistry for non-chemistry majors designed to follow CHEM 110 to provide a one-year sequence in general, organic, and biological chemistry. PRQ: CHEM 110 or CHEM 210.

311. INTRODUCTORY ORGANIC AND BIOLOGICAL CHEMISTRY LABORATORY (1). Designed to accompany CHEM 310. One 3-hour period a week. PRQ: CHEM 110 and CHEM 111, or CHEM 210 and CHEM 212. CRQ: CHEM 310.

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 consent of department.

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. PRQ: CHEM 332. CRQ: CHEM 331 or consent of department.

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 336 or consent of department.

339. ORGANIC CHEMISTRY LABORATORY II (1). Continuation of CHEM 338. One 3-hour period a week. Not available for credit for those having credit for CHEM 333. PRQ: CHEM 338. CRQ: CHEM 337 or consent of department.

370. INTRODUCTORY BIOCHEMISTRY (3). Terminal course in beginning biochemistry for non-chemistry majors. Three lectures a week. PRQ: CHEM 230 or CHEM 330.

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: 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. 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. 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. PRQ: CHEM 441 or consent of department.

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 or consent of department.

450. NANO CHEMISTRY (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: 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: Consent of department.

490X. SCIENCE ACROSS TIME AND CULTURE (2). *Crosslisted as BIOS 484X, ENVS 475X, 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.

493X. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY AND MIDDLE LEVEL EDUCATION (3). *Crosslisted as BIOS 402X, ENVS 483X, 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 GEOL 495X and 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: CHEM 401 or GEOL 401 or PHYS 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 12 weeks. Assignments to be arranged with the discipline director 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. HONORS 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

Ralph Wheeler, Ph.D., Cornell University, professor, chair
 Marc J. Adler, Ph.D., Duke University, adjunct professor
 Gary M. Baker, Ph.D., Purdue University, associate professor
 David S. Ballantine, Jr., Ph.D., University of Maryland, associate professor
 Yingwen Cheng, Ph.D., Duke University, assistant 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, Distinguished Research Professor
 Thomas M. Gilbert, Ph.D., University of California, Berkeley, associate professor
 Timothy Hagen, Ph.D., University of Wisconsin-Milwaukee, 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, Presidential Research, Scholarship and Artistry Professor
 Tao Li, Ph.D., University of South Carolina, assistant professor
 Chhiu-Tsu Lin, Ph.D., University of California, Los Angeles, Distinguished Teaching Professor, Distinguished Research Professor, Board of Trustees Professor, professor emeritus
 W. Roy Mason, Ph.D., Emory University, professor emeritus
 Evgueni Nesterov, Ph.D., Moscow State University, professor
 Irina Nesterova, Ph.D., Moscow State University, assistant 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 emeritus
 Tao Xu, Ph.D., University of Alabama, 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 a double emphasis (in emphases 1 and 2 or emphases 2 and 3 only).

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; a certificate in digital media production; and an interdisciplinary minor in professional communication which is offered jointly with the Department of English. Several of the department's 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.

The Department of Communication participates in the interdisciplinary majors in nonprofit and NGO studies; environmental studies; world languages and cultures; and industrial and systems engineering.

Certain communication studies courses are also offered for the interdisciplinary minors in professional communication, global studies, LGBT studies, linguistics, and women's and gender studies. Certain journalism courses are also offered for the interdisciplinary minors in professional communication, black studies, global studies, and Southeast Asian studies.

Select communication studies and/or journalism courses can be counted toward certificates of undergraduate study in applied ethics; film and television studies; LGBT studies; and women's and gender 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. Students who double major in Communication and Journalism must take JOUR 480 or COMS 455 or COMS 403. In no case will the COMS or JOUR law/ethics course count towards the same law/ethics block required for each major.

Major in Communication Studies (B.A. or B.S.)

Three emphases are available to students majoring in communication studies. The emphasis in advocacy 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. Students who double major in Communication and Journalism must take JOUR 480 or COMS 455 or COMS 403. In no case will the COMS or JOUR law/ethics course count towards the same law/ethics block required for each major.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Advocacy and Public Communication

Requirements in Department (33-34)

- 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)
 - 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 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 361¹ - Business and Professional Communication (3)
 - COMS 497 - Internship (3)
 - JOUR 200A or JOUR 200B - Basic News Writing (3)
 - JOUR 312 - Graphics of Communications (3)
- Five of the Following (15)
 - *COMS 220 - Rhetoric and Public Issues (3)
 - *COMS 230 - Rhetoric and the Media (3)
 - COMS 291 - Methods of Research in Communication (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)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

¹ If not used to fulfill requirement above.

² Course must be taken for 3 semester hours to be counted in choice block.

^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 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 498A² - 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)

Requirements outside Department (B.A., 0-12; B.S., 12-16)

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, Advocacy and Public Communication: 33-46 (B.A.) OR 45-50 (B.S.)

Emphasis 2. Media Studies

Requirements in Department (35-40)

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 349 - Introduction to Audio 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 (15-20)
 Of these 15-20 semester hours, no more than 9 may be at the 300 level. Profiles of suggested courses of study are available for students interested in corporate video production, corporate interactive video, broadcast production, and cultural studies.
 COMS 291 - Methods of Research in Communication (3)
 COMS 309 - Performance in Speech Communication (3)
 COMS 349¹ - Introduction to Audio Production (4)
 COMS 357¹ - Introduction to Studio Production (4),
 COMS 358¹ - Introduction to Field Production (4)
 COMS 359¹ - Interactive Media Production I (4)
 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).
 ^COMS 419 - Political Communication in America (3)
 *COMS 426 - Advanced Documentary Field Production (4)
 COMS 427 - Advanced Narrative Field Production (4)
 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 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: 35-54 (B.A.) OR 45-57 (B.S.)

Emphasis 3. Organizational/Corporate Communication

Requirements in Department (34-36)

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)
 OR COMS 497 - Internship (3)
 Electives from COMS courses numbered 300 and above (3)
 Electives from COMS courses numbered 400 and above (3)

Requirements outside Department (B.A., 0-12; B.S., 10-15)

For the B.A. degree

Fulfillment of B.A. foreign language requirement (0-12)
 (See "Foreign Language Requirement for the B.A. Degree.")

For the B.S. degree

Mathematics/laboratory science sequence (10-15)
 (See "College Requirement for the B.S. Degree.")

Total Hours for Emphasis 3, Organizational/Corporate Communication: 35-47 (B.A.) OR 45-50 (B.S.)

* Available for general education credit.

^ This is a Writing Infused Course.

¹ If not used to fulfill requirement above.

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.

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. Students who double major in Communication and Journalism must take JOUR 480 or either COMS 455 or COMS 403. In no case will the COMS or JOUR law/ethics course count towards the same law/ethics block required for each major.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (36-37)

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 353 - Sports Journalism (3)

JOUR 354 - Fundamentals of Broadcast News (3)

JOUR 357 - Television Newscast Production/Anchoring (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: (6-7)

JOUR 210 - Information Gathering in the Digital Age (3)

JOUR 312 - Graphics of Communications (3)

JOUR 356 - Electronic News Gathering and Editing (4)

JOUR 364 - Television News Producing and Directing (3)

JOUR 410 - News Editing (3)

JOUR 461 - Specialized Press Editing (3)

JOUR 492 - Internship in Journalism (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: 36-49 (B.A.)

OR 46-52 (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 global 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 295 - 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)

* Available for general education credit.

^ This is a Writing Infused Course.

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 (21-22)

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)

OR Elective from JOUR courses in News in Society choice block numbered 400 and above for students who are required to take JOUR 480 or COMS 455 as part of their major course work (3)

News Writing: Choose one of the following (3)

^JOUR 301 - Article Writing (3)

JOUR 302 - News 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 353 - Sports Journalism (3)

JOUR 354 - Fundamentals of Broadcast News (3)

JOUR 357 - Television Newscast Production/Anchoring (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 (3-4)

JOUR 210 - Information Gathering in the Digital Age (3)

JOUR 312 - Graphics of Communications (3)

JOUR 356 - Electronic News Gathering and Editing (4)

JOUR 364 - Television News Producing and Directing (3)

JOUR 410 - News Editing (3)

JOUR 461 - Specialized Press Editing (3)

JOUR 492 - Internship in Journalism (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.

* Available for general education credit.

^ This is a Writing Infused Course.

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 426 - Advanced Documentary Field Production (4)
- COMS 427 - Advanced Narrative Field Production (4)
- COMS 436 - Advanced Post 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.

291. 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.

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.

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..

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. 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. Communication/Journalism double majors who take COMS 403 must take an additional Journalism course from the News in Society course block.

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 or COMS 291.

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.

408. TOPICS IN COMMUNICATION ENGAGEMENT (3). Connects communication students with the external public in the application of classroom knowledge. Personal contact and communication with members of the external public are required. May be repeated with a change of focus.

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 (4). 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 successful portfolio review or consent of department.

427. ADVANCED NARRATIVE FIELD PRODUCTION (4). 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: JOUR 335 with a grade of C or better or COMS 370 or COMS 380; 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. art studio and design 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. Communication/Journalism double majors who take COMS 455 must take an additional Journalism course from the News in Society course block.

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 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.

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. No more than 6 semester hours of the combination of COMS 408 and COMS 497 may be included in the major or 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 203 or ENGL 204.

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 203 or ENGL 204.

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 with a grade of C or better or JOUR 200B with a grade of C or better.

302. NEWS REPORTING (3). Experiences and practices in news gathering and reporting. Laboratory work based on live campus and community assignments. PRQ: JOUR 200A with a grade of C or better or JOUR 200B with a grade of C or better.

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.

353. SPORTS JOURNALISM. (3). Principles and practices of writing and reporting about sports for print and online media, including game coverage, features, columns and blogs. Examination of the relationship between sports and mass media. PRQ: JOUR 200A or JOUR 200B.

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 with a grade of C or better or JOUR 200B with a grade of C or better; or COMS 355 for COMS majors only. CRQ: JOUR 356.

356. ELECTRONIC NEWS GATHERING AND EDITING (4). 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. Laboratory to be arranged. PRQ: JOUR 200A with a grade of C or better or JOUR 200B with a grade of C or better; or COMS 355 for COMS majors only. CRQ: JOUR 354.

357. TELEVISION NEWSCAST PRODUCTION/ANCHORING (3). Study and practice of television newscast production in both scripted and unscripted formats using digital and analog studio equipment. Focus on the special concepts, problems, and skills of airing television news in an increasingly automated technological environment. Instruction on various jobs such as anchors, editors, photographers, reporters, and writers to producing and directing live television newscasts. Laboratory to be arranged. PRQ: JOUR 354 with a grade of C or better and JOUR 356 with a grade of C or better.

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 with a grade of C or better or JOUR 200B with a grade of C or better and JOUR 335 with a grade of C or better; or consent of department.

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: JOUR 357 with a grade of C or better.

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 with a grade of C or better or JOUR 200B with a grade of C or better.

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 with a grade of C or better, 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 with a grade of C or better or JOUR 200B with a grade of C or better.

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 with a grade of C or better 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 with a grade of C or better 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: JOUR 335 with a grade of C or better or COMS 370 or COMS 380; 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 with a grade of C or better.

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 with a grade of C or better or JOUR 200B with a grade of C or better; 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 with a grade of C or better.

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. Communication/Journalism double majors who take Jour 480 must take an additional Communication 400 level course not used to satisfy other major requirements. 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 and 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 be repeated to a maximum of 6 semester hours when topic varies. 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 be repeated to a maximum of 6 semester hours when topic varies. 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 Studies and Journalism Faculty

Mehdi Semati, Ph.D., University of Missouri-Columbia, professor, acting chair
 Ferald J. Bryan, Ph.D., University of Missouri, associate professor
 Gary Burns, Ph.D., Northwestern University, professor emeritus
 Kate Cady, Ph.D., University of Iowa, associate professor
 Randy Caspersen, M.F.A., Columbia College, associate professor
 William Cassidy, Ph.D., University of Oregon, professor
 Jeffrey P. Chown, Ph.D., University of Michigan, Distinguished Teaching Professor, Board of Trustees Professor, emeritus
 David Gunkel, Ph.D., DePaul University, Distinguished Teaching Professor
 Andrea L. Guzman, Ph.D., University of Illinois at Chicago, assistant professor
 Janice D. Hamlet, Ph.D., Ohio State University, associate professor
 David Henningsen, Ph.D., University of Wisconsin, professor
 Mary Lynn Henningsen, Ph.D., University of Wisconsin, professor
 Richard Holt, Ph.D., University of Illinois, professor
 Betty La France, Ph.D., Michigan State University, professor
 Robert Miller, Ph.D., Northwestern University, professor emeritus
 Joseph Scudder, Ph.D., Indiana University, Distinguished 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
 Shupe Yuan, Ph.D., Michigan State University, assistant professor

Department of Computer Science (CSCI)

Admission to the major in the Department of Computer Science is limited. See "Limited Admissions and Limited Retention Requirements" in this catalog.

The Department of Computer Science offers a program leading to the B.S. degree with a major in computer science. A student must choose an emphasis in 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

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 (10-15)

MATH 206 - Introductory Discrete Mathematics (3)
 MATH 211 - Calculus for Business and Social Science (4),
 OR MATH 229 and MATH 230 - Calculus I and II (8)
 STAT 200 - Elementary Statistics (4),
 OR STAT 300 - Introduction to Probability and Statistics (3)

Total Hours for Emphasis 1, Software Development: 55-63

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 (19-27)

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 (4),
 OR MATH 229 and MATH 230 - Calculus I and II (8)
 STAT 200 - Elementary Statistics (4),
 OR STAT 300 - 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 295 - Principles of Marketing (3)

Total Hours for Emphasis 2, Enterprise Software: 65-75

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 401 - Theory of Computation (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 300 - 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 435 - Applied Regression Analysis (3)

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 (4), 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, and Android 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 (15)

CSCI 321 - iOS Mobile Device Programming (4)
 CSCI 322 - Android Mobile Device Programming (4)
 CSCI 467 - Introduction to Software Engineering (4)
 One of the following:
 CSCI 427 - Advanced iOS Mobile Device Programming (3)
 CSCI 428 - Advanced Android Mobile Device Programming (3)

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, graphics, rich media content, 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 241 or consent of department.

390. INTERNSHIP (3). Work in the computer field for a minimum of 20 hours per week. 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.

401. THEORY OF COMPUTATION (3). Introduction to automata theory, formal languages, and computability theory with an emphasis on how these topics relate to computers and computer programs. PRQ: MATH 206 or MATH 211 or MATH 229; and CSCI 240.

427. ADVANCED iOS MOBILE DEVICE PROGRAMMING (3). In-depth coverage of advanced programming for mobile devices that use Apple's iOS operating system. Topics include exception handling, memory and thread management, databases, and web services. Extensive laboratory work. PRQ: CSCI 321.

428. ADVANCED ANDROID MOBILE DEVICE PROGRAMMING (3). In-depth coverage of Android application programming topics that build on the foundations taught in CSCI 322. These may include accessing JSON from a web service, creating and accessing an on board database, using location and map services, as well as exploring new hardware and software options. Extensive laboratory work. PRQ: CSCI 322.

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.

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, chair

Hamed Alhoori, Ph.D., Texas A & M University, assistant professor

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

Minmei Hou, Ph.D., Pennsylvania State University, associate professor

Ibrahim Onyuksel, Ph.D., University of Michigan, professor

Michael E. Papka, Ph.D., University of Chicago, professor

Jie Zhou, Ph.D., Concordia University, professor

Department of Economics (ECON)

The Department of Economics offers two degree programs. The B.A. degree program provides students with a strong intuitive understanding of the role economic incentives play in shaping society, and in the role society plays in shaping incentives. The B.S. degree program, in addition, stresses statistical and quantitative methods used to model and evaluate human action, particularly as those actions are carried out by governments or businesses.

Both degree programs provide excellent preparation for employment in business, government, or the foreign service, for law school, or for graduate studies in business administration or in public policy studies. The B.S. degree program provides stronger preparation for graduate studies in economics.

The Department of Economics welcomes minors from any discipline. Some lower division economics courses can be used by non-majors toward fulfilling the social sciences area requirement in the university's general education program. The department also participates in the interdisciplinary minors in black studies, Chinese/Japanese studies, environmental studies, international studies, and Latino/Latin American 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 (34-35)

*ECON 260 - Principles of Microeconomics (3)
 *ECON 261 - Principles of Macroeconomics (3)
 ECON 290 - Economic Data Analysis with Excel (1)
 OR OMIS 324/STAT 324X - Introduction to Business Data Analytic Tools (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)
 ECON 390A - Basic Econometrics Laboratory (1),
 Select from economics courses at the 300 or 400 levels (18)

Requirements outside Department (B.A., 3-16; B.S., 15)

For the B.A. degree

Fulfillment of B.A. foreign language requirement (0-12)
 (See "Foreign Language Requirement for the B.A. Degree.")
 *STAT 100 - Basic Statistics (3),
 OR STAT 200 - Elementary Statistics (4),
 OR UBUS 223 - Introduction to Business Statistics (3)

For the B.S. degree

CSCI 210 - Elementary Programming (4)
 OR CSCI 240 - Computer Programming in C++ (4)
 One of the following groups (11-15)
 *MATH 210 - Finite Mathematics (3)
 *MATH 211 - Calculus for Business and Social Science (4)
 STAT 200 - Elementary Statistics (4)
 OR
 *MATH 229, and MATH 230 - Calculus I and II (8)
 STAT 300 - Introduction to Probability and Statistics (3)

Total Hours for a Major in Economics: 37-52 (B.A.) OR 50 (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.

Emphasis 1. Financial Economics (B.S. only) (50)

The emphasis in financial economics is designed for students who wish to undertake a program of study in the economics of the financial sector. The requirements for the emphasis include all of the requirements for a B.S. in Economics in addition to courses specific to the economic analysis of financial activity.

Requirements in Department (35-37)

ECON 260 - Principles of Microeconomics (3)
 ECON 261 - Principles of Macroeconomics (3)
 ECON 290 - Economic Data Analysis with Excel (1)
 OR OMIS 324/STAT 324X - Introduction to Business Data Analytic Tools (3)
 ECON 360 - Intermediate Microeconomics (3)
 ECON 361 - Intermediate Macroeconomics (3)
 ECON 370 - Current Economic Issues (3)
 ECON 390 - Basic Econometrics and Economic Applications (3)
 AND ECON 390A - Basic Econometrics Laboratory (1)
 ECON 393 - Introduction to Mathematical Methods in Economics (3)
 ECON 489 - Seminar in Economics Analysis (3)
 ECON 490 - Economic Statistics and Econometrics (3)
 ECON 492 - Research Methods in Economics (3)
 Select from economics courses at the 300- or 400-level (3)
 Recommended: ECON 484X/STAT 484 - Financial Derivatives (3)

Requirements outside the Department (15)

CSCI 240 - Computer Programming in C++ (4)
 *MATH 229 - Calculus I (4)
 MATH 230 - Calculus II (4)
 STAT 300 - Introduction to Probability and Statistics (3)

Total Hours for Emphasis 1, Financial Economics: 50-52 (B.S. only)

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 Educator Licensure Program at the earliest possible opportunity. Educator licensure involves significant requirements in addition to the completion of a degree in economics.

* Available for general education credit.

Admission

Students are admitted to the History and Social Sciences Educator Licensure Program when they have:

- established a file with the History and Social Sciences Educator Licensure 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 2.67;

- passed the Test of Academic Proficiency or equivalent recognized by the ISBE;

- completed at least 6 semester hours of economics at NIU and earned a minimum GPA of 3.00 in all economics courses taken at NIU;

- 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 Educator Licensure Program.

Retention

Students admitted to the program must maintain program GPA requirements, display appropriate professional dispositions, and complete a satisfactory review of progress each semester with the History and Social Sciences Educator Licensure Program. Students must also pass any additional tests required by the ISBE for educator licensure such as the appropriate state Content Area Test (taken before student teaching) and the Teacher Performance Assessment (taken before program completion).

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 and concurrently with the Third Clinical Secondary School Experience in History/Social Sciences.

Other Requirements

Students pursuing educator licensure must take additional, approved course work in history and the social sciences to acquire the broad-based, interdisciplinary knowledge required of secondary social studies educators. Students must also complete approved professional education course work in areas such as special education methods, content-area literacy, and teaching English-language learners. Contact the History and Social Sciences Educator Licensure Program for the current list of history, social science, and education courses approved for fulfilling these requirements.

Students must also complete a three-semester sequence of pre-student teaching clinical experiences, including HIST 401, Third Clinical Secondary School Experience in History/Social Sciences, as well as HIST 400 only upon satisfactory completion of all other work required for graduation and licensure.

Students pursuing 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.

The History and Social Sciences Educator Licensure 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 Educator Licensure Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Educator Licensure 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.

Accelerated B.S./M.A. Program in Economics

Admission

This program leads to both the B.S. and M.A. in Economics degrees. Students who wish to participate in this program should identify themselves to the Department of Economics as majors who will complete the requirement for the B.S. degree having taken the calculus option (MATH 229, MATH 230, and STAT 300). Ideally students will express their interest during their junior year and have completed or be in the process of completing ECON 360, ECON 361, and ECON 390.

Students who are interested in this program and have completed or are in the process of completing ECON 360, ECON 361, ECON 390, MATH 230, and STAT 300 should apply to the Economics M.A. program under the special provisions of this program and in consultation with the Director of Graduate Studies in Economics by the end of their junior year. Students must meet all the degree and application requirements and deadlines given by the Graduate School. Students who have completed the courses MATH 229, MATH 230, STAT 300, and ECON 390 with a grade of B or better may request that the GRE requirement for admission to the M.A. program be waived by the Department of Economics.

Students wishing to take part in this program should be aware of all the regulations and restrictions of accelerated baccalaureate/master's degree programs as outlined in the NIU Graduate School Catalog under the heading of Early Admission of NIU Undergraduates; and Admission to Accelerate Baccalaureate/Master's Degree Programs.

Curriculum

Students must complete all general education requirements and MATH 229, MATH 230, STAT 300, ECON 360, ECON 361, and ECON 390 by the end of their junior year. During their senior year, students will take ECON 590 in the fall semester and 9 semester hours from 500-level elective courses spread across the two semesters of their senior year. If additional electives are taken before completion of the B.S. requirements, only 18 credit hours of these courses may be counted toward the elective requirements for the B.S. degree in Economics. Students are encouraged to enroll in ECON 592 to fulfill their capstone requirement and as a stepping stone toward their M.A. research paper, which is necessary to complete the M.A. degree. Upon receiving their undergraduate degree, students will then enroll in ECON 591, ECON 660, and ECON 661 in the fall semester, ECON 690 and ECON 692 in the spring semester, and be allowed to register for 600- and 700-level elective courses. Upon completion of the course and research paper requirements outlined in the Graduate Catalog for the M.A. in Economics Degree program, the students shall earn the M.A. in Economics.

Students who are part of this accelerated B.S./M.A. in Economics program are not bound by the College of Liberal Arts and Sciences policy that prohibits students from earning more than 60 credit hours in their major.

* Available for general education credit.

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.

186. INTRODUCTION TO ENVIRONMENTAL ECONOMICS (3). Overview of economic analyses of environmental issues such as pollution and resource management. Introduction to marginal thinking, market-based solutions, and government management. Focus on current issues and applying economics in an interdisciplinary manner to other environmental fields.

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.

290. ECONOMIC DATA ANALYSIS WITH EXCEL (1). Topics include graphical representing, summarizing and manipulating the data, analyzing differences between group means (ANOVA), and simple linear regression analysis. Students are expected to know basic Excel operations. PRQ: STAT 208 or STAT 301 or STAT 350 or UBUS 223.

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.

315. SPORTS ECONOMICS (3). The application of microeconomic analysis to the understanding of the market for professional and amateur sports. Topics include the industrial organization of sports markets, competitive balance in sports, public finance of sports facilities, labor markets and discrimination in sports, and amateur and college sports. PRQ: ECON 260 or consent of department.

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).

Topics of current importance to consumers, resource owners, business, and government. May be repeated up to 6 hours as topics change. PRQ: ECON 260 and ECON 261.

371. HEALTH ECONOMICS (3). Applies microeconomic analysis to the behavior of individuals, health care providers, managed care organizations, insurers, pharmaceutical firms, and government to strengthen students' understanding of the health care system and health care policy. PRQ: ECON 260.

372. INCOME DISTRIBUTION AND POVERTY (3). Introduction with emphasis on conditions in the United States, past and present. Understanding the link between inequality and the performance of an economy is an integral part of understanding the very process of development and the effects of different policies. Introduction to the complex issues facing policy makers. PRQ: ECON 260.

373. ECONOMICS AND EQUITY (3). How different forms of economic activities, policies, and methods of government resource allocations affect the distribution of welfare, income, and resources across and among various groups of people and businesses. Understanding how to measure and analyze the poverty, discrimination, equity, and efficiency effects of government programs. PRQ: ECON 260 and ECON 261.

374. GAME THEORY (3). Analysis of decision makers who are aware that their actions and any assumptions made by others about their actions will affect the actions of those others. In the last 25 years, game theory has become the core of economic theory, both micro and macro. Introduction to the tools of game theory and the usefulness of this approach by analyzing several examples. PRQ: ECON 260.

375. INDUSTRIAL ECONOMICS (3). Theoretical aspects of Industrial Organization (IO), the field of economics that studies the structure of markets and the behavior of firms, as well as empirical examples that come from "real life" business practice. Additional focus on industry policies and regulations. Topics include: Theory of the firm and market structure, monopoly practice, oligopoly and collusion, entry deterrence, product differentiation, advertising, and industry regulation. PRQ: ECON 260.

376. ECONOMIC ISSUES AND GOVERNMENT POLICY (3). Provides a practical understanding of economic tools and applies these tools to the analysis of important economic issues and government policies. Exploration and analysis of topics in micro- and macroeconomics that are of current importance to consumers, resource owners, business, and government. 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.

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 as ACSC 460.* Review of financial derivatives including futures, European and American options, Exotic options. Greeks, trading and hedging strategies. Pricing derivative securities with appropriate boundary conditions, including 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: ACSC 405.

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, MATH 229, and 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: Economic majors must have completed required non-elective courses prior to enrolling.

494. INTERNSHIP IN ECONOMICS (1-6). 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 be repeated up to a maximum of 6 semester hours with department approvals Up to 3 semester hours may be applied toward satisfying the requirements for the B.A. or B.S. in Economics. 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 AND MIDDLE GRADES 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 middle grades and secondary levels. PRQ: Admission to the history or social science secondary or middle grades educator licensure program and permission of the Department of History's office of secondary educator licensure.

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 M. Campbell III, Ph.D., Princeton University, professor, chair
Evan Anderson, Ph.D., University of Chicago, associate professor
Ai-ru Cheng, Ph.D., University of North Carolina, associate professor

Alexander Garivaltis, Ph.D. University of Minnesota, assistant professor

Jeremy Groves, Ph.D., Washington University, associate professor

Anna Klis, Ph.D., University of Texas, assistant professor

Maria Ponomareva, Ph.D., Northwestern University, associate professor

Brian Richard, Ph.D., University of Southern Mississippi, faculty affiliate

George Slotsve, Ph.D., University of Wisconsin, professor

Norman Walzer, Ph.D., University of Illinois, faculty affiliate

Virginia Wilcox, Ph.D., Washington University, professor

Wei Zhang, Ph.D., University of Wisconsin, associate professor

Department of English (ENGL)

The Department of English offers a major leading to the choice of a B.A. or B.S. degree. English majors may choose one of three tracks: Studies in Literature, Secondary Licensure in English Language Arts, or Studies in Writing. Each track requires courses across specific groups to encourage a breadth of study. Advisers will help students plan their curricula according to students' professional interests.

Studies in Literature traces the development of British, American, and world culture and thought, from the earliest years to the most recent. This track leads to many career possibilities where the ability to read closely, interpret productively, think critically, and speak and write persuasively are essential skills.

Secondary Licensure in English Language Arts prepares students to teach grades 9-12. Students interested in teaching English in grades 5-8 should fulfill the specified requirements for middle school licensure in English Language Arts. Students from other subject areas may choose to fulfill the requirements for educator licensure in English Language Arts as an additional endorsement.

Studies in Writing includes internship opportunities in professional writing and editing, on campus or with local businesses, companies, and organizations. Students may receive credit and, in some cases, payment for these internships. Interested students should consult the college coordinator of internships.

A certificate of undergraduate study in Creative Writing is available for students in English or other majors.

The department supports several minors. The Literature minor may focus on a particular topic, historical period, or genre such as the novel, short story, play, poetry, or nonfiction. The Linguistics minor includes courses offering a range of approaches to the study of the nature of human language; the cognitive studies minor offers courses with interdisciplinary approaches to the nature of knowledge and thought. The department participates with the Department of Communication in offering a minor in Professional Communication and with the Department of World Languages and Cultures in offering a minor in Comparative Literature. The department also participates in offering interdisciplinary minors with Black Studies, Classical Studies, Latin American Studies, and Gender and Sexuality Studies.

A concentration in Medieval Studies exploring the literary roots and early languages of present-day Britain and Europe is available.

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.

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 Foundational Studies in English composition (ENGL 103, ENGL 203, and ENGL 204). These foundational courses are not counted toward the maximum of 60 hours allowed in a single department, as described in "Special Requirements in the College of Liberal Arts and Sciences."

English majors and minors must take ENGL 200 and ENGL 300 A, B, or C. These courses form the basis for the literary approaches and writing proficiencies needed for English Studies and should be taken as early as possible.

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 the Grammar Exemption Exam (GEE). Teacher licensure candidates in English cannot be exempt from ENGL 207 through the GEE. Students who pass the GEE 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. Failing the GEE necessitates that a student successfully complete ENGL 207.

Major in English (B.A. or B.S.)

The English major enables students with a love of literature, rhetoric, and writing to advance their analytical, research, and communicative skills. The major readies students for a competitive job market in a global economy.

In the English B.A., knowledge of a foreign language prepares students for advanced studies, careers in translation, and intercultural business communication. The English B.A. also prepares future teachers to interact with English language learners and their families.

In the English B.S., students can combine their knowledge of science, technology, engineering, and math with the kinds of excellent reading, writing, and speaking skills that employers value most highly.

The student learning outcomes for the English B.A. and B.S. degrees are located at www.niu.edu/assessment/clearinghouse/outcomes.shtml.

Track 1. English Studies in Literature

Students majoring in the English Studies in Literature track are required to take courses that ground them in medieval to contemporary periods. Students should consult with department advisers regularly about course offerings and degree requirements. Students can also consult with faculty about preparation for advanced literary studies and scholarship, or careers associated with literary history, research, publishing, editing, and archiving.

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)

Group 1 - One of the following

*^ENGL 318 - Exploring Human Language (3)

ENGL 320 - History of the English Language (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)

Group 2 - One of the following (3)

^ENGL 330 - American Literature to 1830 (3)

^ENGL 331 - American Literature: 1830-1860 (3)

^ENGL 332 - American Literature: 1860-1910 (3)

^ENGL 375 - The American Novel (3)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

Group 3 - One of the following (3)

- ^ENGL 333 - American Literature: 1910-1960 (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)

One course from each group below (must include choice of ^ENGL 406, ^ENGL 407, or ENGL 409) (12)

Group 4 - One of the following (3)

- ^ENGL 405 - Early English Literature (3),
- ^ENGL 406 - Chaucer (3),
- ^ENGL 420 - Arthurian Literature (3)

Group 5 - One of the following (3)

- ENGL 407 - Shakespeare (3),
- ^ENGL 408 - The English Renaissance: 1500-1603 (3),
- ^ENGL 409 - Milton (3),
- ^ENGL 410 - 17th Century English Literature: 1603-1660 (3)

Group 6 - One of the following (3)

- ^ENGL 412 - Restoration and 18th Century English Literature (3),
- ENGL 413 - The Romantic Period (3),
- ^ENGL 414 - The Victorian Age (3),
- ^ENGL 470 - The English Novel to 1900 (3)

Group 7 - One of the following (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)

Three additional English courses at the 300-400 level (9)

NOTE: Students in Track 1: English Studies in Literature are strongly encouraged to take at least one elective from the world literature courses listed below:

- ^ENGL 310 - Ideals and ideas in World Literature (3)
- ^ENGL 335 - Non-Western and Third-World Literature (3)
- ^ENGL 337 - Western Literature: Classical and Medieval (3)
- ENGL 338 - Western Literature: Renaissance to 1900 (3)
- ENGL 339 - Recent Western Literature (3)
- ENGL 340 - The Bible as Literature (3)
- ^ENGL 474 - The International Short Story (3)
- ENGL 477 - Postcolonial and New Literatures in English (3)
- ENGL 489 - European Novel (3)

Requirements outside Department (0-12)

Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

Requirements outside Department (10-15)

Fulfillment of B.S. laboratory science/mathematical/computational skills sequence
(See "College Requirement for the B.S. Degree")

Total Hours for a Major in English, Track 1: 39-51 (B.A.); 49-54 (B.S.)

Track 2. English Studies Leading to Secondary Licensure in English Language Arts

Candidates for Secondary Licensure in English Language Arts (grades 9-12) must complete a minimum of 40 hours in English, plus successful completion of student teaching (typically 12 hours).

English majors who seek licensure to teach English Language Arts at the secondary level should consult with the coordinator of the English licensure program at the earliest possible date. Undergraduate majors normally apply for admission to the program at the end of the sophomore year, except in the case of transfer students, who normally apply during 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 the coordinator of educator licensure in English as early as possible.

Admission Requirements

Completion of Foundational Studies in English composition (ENGL 103-ENGL 203, or ENGL 204), oral communication, and quantitative literacy with a grade of C or better in each course used to satisfy these requirements.

A cumulative GPA of at least 2.75 based on a minimum of 15 semester hours of NIU course work.

Completion of at least 9 semester hours of English at NIU, which must include ENGL 200, ENGL 207, and ENGL 300C. Educator licensure candidates must earn a minimum grade of B- in ENGL 300C and a minimum grade of C in other English courses. Required overall English GPA is 3.00.

Written application and satisfactory interview with the program coordinator.

Retention

Candidates for secondary licensure in English Language Arts must maintain a minimum GPA of 2.75 in all work at NIU plus a minimum GPA of 3.00 in English course work at NIU beyond ENGL 103-ENGL 203 or ENGL 204. Candidates 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 for their pre-service portfolio.

Requirements in Department (47-52)

- ENGL 200 - Literary Study: Research and Criticism (3)
- ENGL 207 - Fundamentals of English Grammar (3)
- ^ENGL 300C - Advanced Essay Composition (3)
- ^ENGL 310 - Ideals and Ideas in World Literature (3)
- ^ENGL 322 - Language in American Society (3)

Group 1 - One of the following (3)

- ^ENGL 330 - American Literature to 1830 (3)
- ^ENGL 331 - American Literature: 1830-1860 (3)
- ^ENGL 332 - American Literature: 1860-1910 (3)
- ^ENGL 375 - The American Novel (3)

Group 2 - One of the following (3)

- ^ENGL 333 - American Literature: 1910-1960 (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)**Group 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)

Group 4 - 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 (3)
- ^ENGL 479 - Theory and Research in Literature for English Language Arts (3)
- ^ENGL 480 - Materials and Methods of Teaching English Language Arts (3)

* Available for general education credit.

^ This is a writing infused course.

Fulfills the Human Diversity Requirement.

^ENGL 482 - Clinical Experience in Secondary English Language Arts (1-2). Must be taken concurrently with ENGL 480.

^ENGL 485 - Student Teaching in Secondary English Language Arts (7-12). Students must take 3 semester hours in this course.

^ENGL 404, ENGL 479, ^ENGL 480, ENGL 482, and ENGL 485 must be taken in sequence. ENGL 480 and ENGL 482 must be taken in the semester immediately prior to enrollment in ENGL 485. Licensure candidates are admitted to ENGL 485 only upon application, review of their academic record and professional disposition, 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.")

Requirements outside Department (10-15)

Fulfillment of B.S. laboratory science/mathematical/computational skills sequence
(See "College Requirement for the B.S. Degree")

Students seeking licensure should consult the coordinator as early as possible.

Total Hours for a Major in English, Track 2: 56-74 (B.A.); 57-68 (B.S.)

Additional Requirements

The Illinois State Board of Education (ISBE) 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 (1) (must be taken concurrently with ENGL 479)
ENGL 482 - (see above)

Also Required

The ISBE and requirements for educator licensure in English Language Arts at NIU also specify that candidates in Track 2 must earn a grade of C or better for each course included in required professional course work in reading instruction, human growth and development, and teaching of English Language Learners and exceptional children. Candidates should consult with the coordinator in English licensure to determine which courses satisfy these additional requirements outside the department.

In addition, candidates for secondary licensure in English must pass the Illinois examination for licensure in English Language Arts content, the Illinois Assessment for Professional Teaching (APT), and the Teacher Performance Assessment (edTPA).

Requirements for Middle School Licensure in English Language Arts (30)

The ISBE specifies that candidates earn a C or better in each course required for educator licensure. The ISBE strongly recommends at least 33 hours of preparation in the candidate's primary subject area of middle-school licensure. The following are minimum English department requirements:

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 - Ideas and Ideals in World Literature (3)
^ENGL 315 - Readings in Shakespeare (3),
OR ^ENGL 407 - Shakespeare (3),

One of the following in American literature (3)

^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: 1910-1960 (3)

ENGL 404 - Theory and Research in Written Composition (3)

^ENGL 479 - Theory and Research in Literature for English Language Arts (3)

^ENGL 480 - Methods and Materials of Teaching English Language Arts (3)

Requirements for Educator Licensure in English Language Arts as an Additional Endorsement (24)

The ISBE specifies that candidates earn a grade of C or better in each course required for educator 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 315 - Readings in 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.

Total hours for a Major in English, Track 2: 56-68

Track 3. English Studies in Writing

Students majoring in Studies in Writing should balance technical and creative writing classes to assemble a portfolio that demonstrates to prospective employers their fullest range of writing practices. Students serious about a writing career should also consult with advisers about internships. Students will ground their writing in a substantive understanding of language analysis, literary analysis, literary history, critical thinking, and the major literary genres. Students may also earn the certificate of undergraduate study in Creative Writing.

If the required 39 credit hours in English are satisfied, additional course work in writing may include the following:

COMS 300 - Speech Writing (3)

^COMS 355 - Media Writing (3)

^COMS 466 - Narrative Scriptwriting (3)

^JOUR 301 - Article Writing (3)

JOUR 302 - News Reporting (3)

^JOUR 401 - Editorial and Opinion Writing (3)

THEA 481 - Playwriting I (3)

^THEA 482 - Playwriting Studio (3)

Students should consult with the English department adviser about selecting courses outside the department.

Requirements in Department (42)

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 Licensure in Teaching (3)

^ENGL 407 - Shakespeare (3)

Group 1 - Two of the following (6)

^ENGL 301 - Writing Poetry I (3)

^ENGL 302 - Writing Fiction I (3)

^ENGL 303 - Writing Creative Nonfiction (3)

^ENGL 304 - Writing about the Arts (3)

* Available for general education credit.

^ This is a writing infused course.

Fulfills the Human Diversity Requirement.

^ENGL 305 - Principles of Writing Literary Criticism (3)
 ^ENGL 308 - Technical Writing (3)
 ^*ENGL 350 - Writing Across the Curriculum (3)
 ENGL 398 - Topics in the Practice and Theory of Composition (3-6)

Group 2 - Two of the following (6)

^ENGL 401 - Writing Poetry II (3)
 ^ENGL 402 - Writing Fiction II (3)
 ^ENGL 403 - Technical Editing (3)
 ^ENGL 424 - Topics in Technical Writing (1-3)
 ^ENGL 426 - Digital Writing (3)
 ^ENGL 493 - Writing Creative Nonfiction II (3)
 ENGL 496 - Internship in Writing, Editing, or Training (3-6)

Group 3 - One of the following (3)

^ENGL 318 - Exploring Human Language (3)
 ENGL 320 - History of the English Language (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)

Group 4 - One of the following in Contemporary Literature (3)

ENGL 309 - Popular Genres (3)
 ^ENGL 333 - American Literature: 1910-1960 (3)
 ^ENGL 334 - American Literature: 1960-Present (3)
 ^ENGL 374 - The American Short Story (3)
 ENGL 382 - Women Writers: The Tradition in English (3)
 ENGL 383 - Gay and Lesbian Literature (3)
 ^ENGL 384 - Literary Nonfiction (3)
 ENGL 471 - The English Novel Since 1900 (3)
 ^ENGL 474 - The International Short Story (3)
 *ENGL 477 - Postcolonial and New Literatures in English (3)

Group 5 - One of the following in Drama(3)

ENGL 307 - Drama and Conflict (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)

Group 6 - One of the following in Poetry(3)

ENGL 311 - Transformative Poetry (3)
 ^ENGL 377 - American Poetry since 1900 (3)
 ^ENGL 405 - Early English Literature (3)
 ^ENGL 406 - Chaucer (3)
 ^ENGL 409 - Milton (3)
 ^ENGL 475 - British Poetry since 1900 (3)

Group 7 - One of the following in British Historical Literature (3)

^ENGL 405 - Early English Literature (3)
 ^ENGL 408 - The English Renaissance (3)
 ^ENGL 410 - 17th Century English Literature (3)
 ^ENGL 412 - Restoration and 18th Century Literature (3)
 ^ENGL 413 - The Romantic Period (3)
 ^ENGL 414 - The Victorian Age (3)
 ^ENGL 420 - Arthurian Literature (3)
 ^ENGL 470 - The English Novel to 1900 (3)

Group 8 - One of the following in American Historical Literature (3)

^ENGL 330 - American Literature to 1830 (3)
 ^ENGL 331 - American Literature: 1830-1860 (3)
 ^ENGL 332 - American Literature: 1860-1910 (3)
 ^ENGL 381A - American Ethnic Literature: Native American Literature (3)
 ^ENGL 381B - American Ethnic Literature: Latina/o Literature (3)
 ^ENGL 381C - American Ethnic Literature: African American Literature (3)
 ^ENGL 381D - American Ethnic Literature: Special Topics (3)

Requirements outside Department (0-12)

Fulfillment of B.A. foreign language requirement (0-12)

Requirements outside Department (10-15)

Fulfillment of B.S. laboratory science/mathematical/computational skills sequence
 (See "College Requirement for the B.S. Degree")

Total hours for a Major in English, Track 3: 42-54 (B.A.); 52-55 (B.S.)

Accelerated B.A. or B.S./J.D. Program in English and the College of Law

Admission

The accelerated program leads to both the B.A. or B.S. in English and J.D. degree. Students who want to complete this program must identify themselves to the English department as majors who wish to complete the accelerated program. Undergraduates who major in English and have completed at least 90 semester hours of undergraduate course work (including all general education and major requirements) with a minimum GPA of 3.25 are eligible to apply for admission to NIU's College of Law under the special provisions of this program. As part of the application to the College of Law, applicants must take the LSAT and must receive a score at or above the 50th percentile of the previous year's matriculating law class. Applicants are strongly advised to take the LSAT and submit their application to the College of Law no later than February 15 of the applicant's junior year. Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of the applicants to the program, the number and quality of applicants to the College of Law in general, as well as other factors normally considered in admissions decisions by the College of Law.

Curriculum

Students must complete all the requirements of the English B.A. degree as well as all general education requirements by the end of their junior year. Students accepted into the College of Law pursuant to the special provisions of this program will matriculate in the College of Law in the fall of their senior year. Up to 30 hours of law 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

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

^ This is a Writing Infused Course.

* Fulfills the Human Diversity Requirement.

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 About the Arts (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.

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.

203. RHETORIC AND COMPOSITION II, RESEARCHED WRITING IN THE DOMAINS (3). Critical reading and research-based writing with emphasis on the writing process and preparing students to participate in professional and academic discussions in the three domains: Creativity and Critical Analysis, Nature and Technology, and Society and Culture. Basic research methodology, source evaluation, and collaborative projects 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.

203A. Researched Writing Across the Three Domains
203B. Researched Writing in Creativity and Critical Analysis
203C. Researched Writing in Nature and Technology
203D. Researched Writing in Society and Culture

204. RHETORIC AND COMPOSITION, ACCELERATED RESEARCHED WRITING IN THE DOMAINS (3). Concentrated rhetorical approach to critical reading and research-based writing with emphasis on the writing process and preparing students to participate in professional and academic discussions in the three domains: Creativity and Critical Analysis, Nature and Technology, and Society and Culture. Basic research methodology, source evaluation, and collaborative projects required in all sections. Students with credit for ENGL 204 may not take ENGL 103 or ENGL 203. 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 ABOUT THE ARTS (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.

305. PRINCIPLES OF WRITING LITERARY CRITICISM (3). Composing essays on literary works based on readings in literary theory. Applying literary theories, critical methods and modes, principles of evaluation, appreciation, and interpretation.

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.

426. DIGITAL WRITING (3). Study of the principles and strategies for writing in digital environments, including relevant issues such as ethics, usability, accessibility, utilizing social media, ownership, and privacy. Practice writing web-based genres such as blogs, wikis, social media, and websites.

451. ESL RHETORIC AND COMPOSITION I (0). 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. Grade of C or better required to satisfy written English proficiency requirement. Not available for credit. PRQ: Placement by testing and consent of department.

452. ESL RHETORIC AND COMPOSITION II (0). 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. Grade of C or better required to satisfy written English proficiency requirement. Not available for credit. PRQ: ENGL 451.

453. ESL RHETORIC AND COMPOSITION (0). 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. Grade of C or better required to satisfy written English proficiency requirement. Not available for credit. PRQ: Placement by testing and consent of department.

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. EXPLORING HUMAN LANGUAGE (3). Introduction to principles of linguistic analysis. Additional topics may include biological foundations of language, linguistic variation and change, language acquisition, and classification of world languages.

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 WGSS 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 (3).

- A. English Language Arts. 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.
- B. Middle Level Content Areas. Theory and research applied to principled practices in teaching and evaluating composition in middle school content areas other than English Language Arts, with emphasis on meeting Common Core Standards for writing in the multicultural classroom. Aligned with the Illinois Professional Teaching Standards.

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).

- A. At the Secondary Level. 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, especially for learners at the high level (9-12). 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.

B. At the Middle Level. Methods, curriculum materials, and technologies essential to the teacher of English 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 instructional activities and multiple representations of concepts to accommodate diverse students' characteristics and abilities, especially for learners at the middle school level (grades 5-8). 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.

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. LITERATURE AND POPULAR CULTURE (3). Exploration of drama, fiction, film, graphic novels, poetry, and television adaptations to see how writers convince readers to enter the worlds and believe in the characters they create. Survey with selected authors.

115. BRITISH IDENTITIES, BRITISH LITERATURE (3). Britain's literary traditions and cultures through novels, poetry, drama, non-fiction, and short stories that have captivated readers from early times to now. Historical survey with selected authors.

116. AMERICAN IDENTITIES, AMERICAN LITERATURE (3). Who Americans are and what shapes their beliefs. Fiction, poetry, nonfiction, and dramatic works that have challenged or complicated what it means to be "American." Historical survey with selected authors.

117. LITERATURE OF SOCIAL JUSTICE (3). Literary exploration of how poverty, discrimination, and systematic oppression have affected diverse people who sought equal opportunity and basic human rights. Survey of fiction, nonfiction, drama, and poetry by selected British, postcolonial, and American authors will demonstrate how creative works have raised readers' critical consciousness in different periods and contexts.

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.

307. DRAMA AND CONFLICT (3). World drama, from Lysistrata to Angels in America, focusing on themes of struggle, reform, and compassion. Selected authors may represent a specific literary period or include several periods.

309. POPULAR GENRES (3). Study of how literature constantly evolves into popular genres such as gothic mysteries, westerns, fantasy, science fiction, young adult adventures, horror, fan fiction, and graphic novels. Explore examples of a selected genre and find out about the social conditions that trigger these texts. Check with department for specific genre and authors covered.

310. IDEAS AND IDEALS IN WORLD LITERATURE (3). Translations of epics, religious writings, treatises on love, myths, novels, essays, and plays--ancient to modern, Eastern and Western. How to define what the "classics" are and explore why these works endure. Survey with selected authors.

311. TRANSFORMATIVE POETRY (3). How poetic forms and language persuade readers to see the world in new and unconventional ways, and what makes poems powerful in different cultures and times. Survey with selected poets.

315. READINGS IN SHAKESPEARE (3). Plays and poetry that continue to engage modern audiences with exploration of perennial themes and vivid representations of human experience and conflicts. Credit available for general education and educator licensure candidates in English Language Arts in middle school.

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: 1860-1910 (3). Includes such writers as Dickinson, Twain, James, Chopin, Chesnut, and Wharton.

333. AMERICAN LITERATURE: 1910-1960 (3). Includes such writers as Cather, 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). Critical analysis of creative literary works about other disciplines. For example, drama, poetry, fiction, and non-fiction about business, education, law, politics, psychology, science, sports, technology, theology, or visual and performing arts. Topics announced. May be repeated to a maximum of 6 semester hours when subject varies.

361. LITERATURE OF HEALTH CARE (3). Thematic exploration of disease, health care, and medicine in works from various literary periods and cultures. Survey of fiction, nonfiction, drama, and poetry by selected British, postcolonial, and American authors.

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

Bradley T. Peters, Ph.D., University of Iowa, professor, interim chair
 Melissa Adams-Campbell, Ph.D., Indiana University, assistant professor
 Gulsat Aygen, Ph.D., Harvard University, Presidential Teaching Professor
 William Baker, Ph.D., University of London, Distinguished Research Professor, Board of Trustees Professor, professor emeritus
 Scott Balcerzak, Ph.D., University of Florida, associate professor
 Alexandra G. Bennett, Ph.D., Brandeis University, associate professor
 Betty J. Birner, Ph.D., Northwestern University, professor
 Joseph W. Bonomo, Ph.D., Ohio University, associate professor
 Jeffrey P. Chown, Ph.D., University of Michigan, adjunct professor emeritus
 Nicole Clifton, Ph.D., Cornell University, associate professor
 Lara Crowley, Ph.D., University of Maryland, associate professor
 Timothy Crowley, Ph.D., University of Maryland, associate professor
 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, professor
 Jeffrey Einboden, Ph.D., University of Cambridge, professor
 Philip E. Eubanks, Ph.D., University of Illinois, professor emeritus
 Ibis Gómez-Vega, Ph.D., University of Houston, associate professor
 David Gorman, Ph.D., Columbia University, associate professor
 Ryan Hibbett, Ph.D., Southern Illinois University, assistant professor
 John V. Knapp, Ph.D., University of Illinois, Ph.D., University of Wisconsin, professor emeritus
 Amy K. Levin, Ph.D., City University of New York, professor emeritus
 Doris M. Macdonald, Ph.D., Louisiana State University, associate professor
 Brian T. May, Ph.D., University of Virginia, professor
 Thomas McCann, Ph.D., University of Chicago, professor
 Amy Newman, Ph.D., Ohio University, Distinguished Research Professor, Board of Trustees Professor
 Kathleen Renk, Ph.D., University of Iowa, professor emeritus
 Jessica L. Reyman, Ph.D., University of Minnesota, associate professor
 Timothy Ryan, Ph.D., University of Nevada-Reno, associate professor
 John D. Schaeffer, Ph.D., St. Louis University, professor emeritus
 Diana L. Swanson, Ph.D., University of Minnesota, professor emeritus
 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, geographic and atmospheric sciences, 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 (19)

ENVS 100 - Exploring the Environmental Studies Major (1)
 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 (3-6)
 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., 10-22; 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 CHEM 110 - Chemistry (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 (4)
 STAT 100 - 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 (4),
 OR MATH 229 - Calculus I (4) and MATH 230 - Calculus II (4)
 STAT 200 - 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 420/ENVS 420X - Waterworlds (3)
 #ANTH 423 - Environmental Anthropology of the Middle East: Cultural and Political Ecologies (3)
 ^ANTH 425/^ENVS 425X - Environment and Anthropology (3)
 ANTH 432/ENVS 432X - Nature and the Environment Across Cultures (3)
 ANTH 466/ENVS 466X - Resource Conflicts and Environmental Peacebuilding (3)
 ECON 186 - Introduction to Environmental Economics (3)
 ECON 386 - Environmental Economics (3)
 #HIST 377 - American Environmental History (3)
 ^HIST 389 - Global Climate History (3)
 PHIL 334 - Animal Ethics (3)
 PHIL 335 - Environmental Ethics (3)
 PHIL 337 - Business Ethics (3)
 PHIL 338 - Philosophy of Food (3)
 POLS 220 - Introduction to Public Policy (3)
 ^POLS 324 - Politics of Environmental, Health, and Safety Regulation (3)
 SOCI 364 - Environmental Sociology (3)
 #WGST 435/ENVS 435X - Gender and the Environment (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/^ENVS 444X - Primate Ecology and Conservation (3)

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

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 306 - Severe and Hazardous Weather (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,
 Paleocology (4)
 GEOL 488 - Environmental Change (3)
 Select at least one of the following methods-based courses (3)
 BIOS 412 - Mycology (4)
 CHEM 427 - Environmental Chemistry (3)
 ENVS 409/BIOS 409X/GEOL409X/PHHE 409X - 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 - Soils and Environmental Land Use Planning (3)
 GEOG 406 - Natural Hazards and Environmental Risk (3)
 GEOG 413 - Forest Ecology and Management (3)
 GEOG 490 - Community Geography (3)
 GEOL 390 - Introduction to Groundwater (3)
 GEOL 421 - Environmental Geochemistry (3)
 ^GEOL 477 - Field Methods in Environmental Geosciences (4)
 MET 430 - Micrometeorology (3)
 STAT 300 - Introduction to Probability and Statistics (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 (37)

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 (16)

GEOG 453 - Environmental Management (3)
 *MATH 155 - Trigonometry and Elementary Functions (3)
 *PHYS 150 - Physics (3)
 AND *PHYS 151 - Physics Laboratory (1)
 OR *PHYS 210 - General Physics I (4),
 OR *PHYS 253 - Fundamentals of Physics I: Mechanics (4)
 TECH 417 - Design for Energy Efficiency and Green Materials (3)
 TECH 484 - Energy Management (3)
 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 - Environmental Sustainability Practices for 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 315/GEOG 315X - Geography of Energy (3)
 ENVS 409/BIOS 409X/GEOL409X/PHHE 409X - 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 406 - Natural Hazards and Environmental Risk (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 and Particle Physics (3)
 Select one of the following humanities and social sciences courses (3)
 *ANTH 420/ENVS 420X - Waterworlds (3)
 *ANTH 423 - Environmental Anthropology of the Middle East: Cultural and Political Ecologies (3)
 ^ANTH 425/^ENVS 425X - Environment and Anthropology (3)
 ANTH 432/ENVS 432X - Nature and the Environment Across Cultures (3)
 ANTH 464/ENVS 464X - Disasters without Borders (3)
 ANTH 466/ENVS 466X - Resource Conflicts and Environmental Peacebuilding (3)
 ECON 186 - Introduction to Environmental Economics (3)
 ECON 386 - Environmental Economics (3)
 GEOG 253 - Environment and Society (3)
 GEOG 425 - Geography of Food and Agriculture (3)
 GEOG 455 - Land-Use Planning (3)
 *HIST 377 - American Environmental History (3)
 ^HIST 389 - Global Climate History (3)
 PHIL 334 - Animal Ethics (3)
 PHIL 335 - Environmental Ethics (3)
 PHIL 337 - Philosophy of Food (3)
 WGSS 435/ENVS 435X - Gender and the Environment
 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. Nature in Society (33-34)

In this emphasis, students will study environmental issues through time and from diverse perspectives, preparing them to better understand and critically assess contemporary environmental challenges. The emphasis gives students broad exposure to how the environment is represented and researched in the social sciences and humanities. Throughout the emphasis, students will critically examine the notion of sustainability as a potential principle underlying and guiding human interaction with the environment. Students will investigate local and global manifestations of environmental problems and explore how rural/urban linkages influence sustainability.

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 334 - Animal Ethics (3)
 PHIL 335 - Environmental Ethics (3)
 WGSS 435/ENVS 435X - Gender and the Environment (3)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

¹ Course taught on an intermittent basis and will count toward ENVS when the topic is appropriate.

Select one of the following social science courses (3)

- ANTH 420/ENVS 420X - Waterworlds (3)
- ^ANTH 425/ENVS 425X - 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 303 - Writing Creative Nonfiction (3)
- ENGL 308 - Technical Writing (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 (15-16)

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 420/ENVS 420X - Waterworlds (3)
 - *ANTH 423 - Environmental Anthropology of the Middle East: Cultural and Political Ecologies (3)
 - 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/^ENVS 425X - Environment and Anthropology (3)
 - ANTH 432/ENVS 432X - Nature and the Environment Across Cultures (3)
 - ^ANTH 444/^ENVS 444X - Primate Ecology and Conservation (3)
 - ANTH 464/NNGO 464X - Disasters without Borders (3)
 - ANTH 466/ENVS 466X - Resource Conflicts and Environmental Peacebuilding (3)
 - ANTH 491¹ - Current Topics in Anthropology (3)
 - ECON 186 - Introduction to Environmental Economics (3)
 - ECON 386 - Environmental Economics (3)
 - *GEOG 303 - Water Resources and the Environment (3)
 - GEOG 425 - Geography of Food and Agriculture (3)
 - GEOG 430 - Population Geography (3)
 - GEOG 453 - Environmental Management (3)
 - GEOG 455 - Land-use Planning (3)
 - NNGO 429 - International NGOs and Globalization (3)
 - 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 376 - U.S. Capitalism and its Critics (3)
 - *HIST 377 - American Environmental History (3)
 - ^HIST 386 - History of Human Rights (3)

^HIST 389 - Global Climate History (3)

*HIST 465 - Gilded Age and Progressive Era (3)

HIST 466 - Corporate America: 1900-1929 (3)

*HIST 467 - The U.S. in Depression and War, 1929-1960 (3)

*HIST 468 - America Since 1960 (3)

PHIL 331 - Ethics (3)

PHIL 335 - Environmental Ethics (3)

PHIL 337 - Business Ethics (3)

PHIL 338 - Philosophy of Food (3)

PHIL 353 - Philosophy of Law (3)

PHIL 360 - Philosophy of Science (3)

PHIL 361 - Social and Political Philosophy (3)

PHIL 430¹ - Topics in Ethics (3)

PHIL 450¹ - Topics in Social and Political Philosophy (3)

WGSS 430¹ - Special Topics in Women's and Gender Studies (3)

Select one of the following science, engineering, and technology courses (3-4)

BIOS 106 - Environmental Biology (3)

BIOS 406 - Conservation Biology (4)

*ENVS 210 - Introduction to Sustainable Food Systems (3)

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)

GEOL 322 - Paleogeography, Paleoclimatology, Paleoecology (4)

MEE 101 - Energy and the Environment (3)

TECH 245 - Pollution Prevention and Sustainable Production (3)

Emphasis 4. Environmental Policy (30-31)

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/^ENVS 425X - Environment and Anthropology (3)

ANTH 432/ENVS 432X - Nature and the Environment Across Cultures (3)

ANTH 464/NNGO 464X - Disasters without Borders (3)

GEOG 425 - Geography of Food and Agriculture (3)

NNGO 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 420/ENVS 420X - Waterworlds (3)

*ANTH 423 - Environmental Anthropology of the Middle East: Cultural and Political Ecologies (3)

^ANTH 425/^ENVS 425X - Environment and Anthropology (3)

ANTH 432/ENVS 432X - Nature and the Environment Across Cultures (3)

ANTH 464/NNGO 464X - Disasters Without Borders (3)

ANTH 466/ENVS 466X - Resource Conflicts and Environmental Peacebuilding (3)

ECON 386 - Environmental Economics (3)

SOCI 364 - Environmental Sociology (3)

Select one of the following humanities courses (3)

ENVS 435X/WGSS 435 - Gender and the Environment (3)

*HIST 377 - American Environmental History (3)

*HIST 389 - Global Climate History (3)

PHIL 334 - Animal Ethics (3)

PHIL 335 - Environmental Ethics (3)

PHIL 337 - Business Ethics (3)

* Available for general education credit.

^ This is a Writing Infused Course.

* Fulfills the Human Diversity Requirement.

Electives (21-22)

Select at least two of the following policy courses (6-9)

- ECON 186 - Introduction to Environmental Economics (3)
- 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 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 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 of 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)
- ^HIST 389 - Global Climate History (3)
- PHIL 331 - Ethics (3)
- PHIL 334 - Animal Ethics (3)
- PHIL 335 - Environmental Ethics (3)
- PHIL 337 - Business Ethics (3)
- PHIL 338 - Philosophy of Food (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)
- *WGSS 435/^ENVS 435X - Gender and the Environment (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 210 - Introduction to Sustainable Food Systems (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)
- GEOG 490 - Community Geography (3)
- GEOL 320 - Environments and Life through Time (4)
- GEOL 322 - Paleogeography, Paleoclimatology, Paleocology (4)
- MEE 101 - Energy and the Environment (3)
- TECH 245 - Pollution Prevention and Sustainable Production (3)

Emphasis 5. Water Sciences (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 - Planet Earth (3) AND GEOL 121 - Planet Earth Laboratory (1)

*GEOG 303 - Water Resources and the Environment (3)

GEOL 390 - Introduction to Groundwater (3),
OR GEOL 490 - Hydrogeology (3)

ENVS 409/BIOS 409X/GEOL409X/PHHE 409X - Water Quality (4)

Select three of the following conceptually-based courses (9-11)

*ANTH 420/ENVS 420X - Waterworlds (3)
ANTH 343/ENVS 343X - Extinction: Where the Wild Things Were (3)

- CHEM 427 - Environmental Chemistry (3)
- BIOS 313 - Microbiology (4)
- BIOS 406 - Conservation Biology (4)
- BIOS 448 - Aquatic Ecology (4)
- GEOG 306 - Severe and Hazardous Weather (3)
- GEOG 492/GEOL 492X - Hydrology (3)
- GEOL 421 - Environmental Geochemistry (3)
- GEOL 442/GEOL 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)

- *ENVS 210 - Introduction to Sustainable Food Systems (3)
- GEOG 302 - Soil Science (4)
- GEOG 359 - Introduction to Geographic Information Systems (3)
- GEOG 368 - Climate Change: Science, Impacts and Mitigation (3)
- GEOG 403 - Soils and Environmental Land Use Planning (3)
- GEOG 406 - Natural Hazards and Environmental Risk (3)
- GEOG 453 - Environmental Management (3)
- GEOG 455 - Land-Use Planning (3)
- GEOG 490 - Community Geography (3)
- GEOL 320 - Environments and Life through Time (4) OR
- GEOL 322 - Paleogeography, Paleoclimatology, Paleocology (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/ENVS 351X - Elements of Environmental Health (3)
- *STAT 300 - Introduction to Probability and Statistics (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)
- TECH 437 - Fundamentals of Industrial Hygiene (3)
- TECH 438 - Safety in Transportation Systems (3)

Select one of the following humanities and social sciences courses (3)

- *ANTH 420/ENVS 420X - Waterworlds (3)
- *ANTH 423 - Environmental Anthropology of the Middle East: Cultural and Political Ecologies (3)
- ^ANTH 425/^ENVS 425X - Environment and Anthropology (3)
- ANTH 432/ENVS 432X - Nature and the Environment Across Cultures (3)
- ANTH 466/ENVS 466X - Resource Conflicts and Environmental Peacebuilding (3)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

¹ Course taught on an intermittent basis and will count towards ENVS when the topic is appropriate

ECON 186 - Introduction to Environmental Economics (3)
 ECON 386 - Environmental Economics (3)
 *HIST 377 - American Environmental History (3)
 ^HIST 389 - Global Climate History (3)
 NNGO 429 - International NGOs and Globalization (3)
 PHIL 335 - Environmental Ethics (3)
 PHIL 337 - Business Ethics (3)
 PHIL 338 - Philosophy of Food (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.)**

Emphasis 6. Educator Licensure - Environmental Science (96)

Students must complete a program of study approved by the director of the Environmental Science licensure program designed to provide a broad background in the discipline and meet the requirements for an undergraduate major in Environmental Sciences at NIU. Students pursuing secondary science educator licensure in environmental science must have a grade of C or better in all course work specifically required for licensure. This includes all environmental science, biology, chemistry, physics, and math courses, pedagogy, and written communication, oral communication, and psychology general education classes.

Admission and Retention Requirements

Candidates must submit an application in writing to the director of the Environmental Science licensure program.

Undergraduates must have a GPA of 2.50 in all work at NIU. Candidates must also have a minimum combined GPA of 2.70 in NIU courses numbered 200 and above in physical and biological sciences and mathematics.

All potential certification candidates must have a satisfactory review of progress with the departmental licensure adviser each semester after admission to the certification program. The candidate must also:

- take and pass the ICTS Environmental Science Content Test prior to applying to student teaching.
- take and pass the ICTS Assessment of Professional Teaching test before completion of the program.

Environmental Science Educator Licensure

All retention requirements listed above.

Five upper-division courses in environmental science (15), including:

- 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/TECH 305 - Green Technologies (3)

Electives in designated courses teaching environmental science concepts (12)

- ^ANTH 425 - Environment and Anthropology (3)
- ANTH 432 - Nature and the Environment Across Cultures (3)
- BIOS 406 - Conservation Biology (4)
- BIOS 409X/ENVS 409/GEOL 409X/PHHE 409X - Water Quality (4)
- ECON 386 - Environmental Economics (3)
- ENVS 315/GEOG 315X - Geography of Energy (3)
- GEOG 253 - Environment and Society (3)
- *GEOG 303 - Water Resources and the Environment (3)
- GEOG 322 - Geography of World Plant Communities (3)
- GEOG 368 - Climate Change: Science, Impacts and Mitigation (3)
- GEOG 453 - Environmental Management (3)

- GEOG 455 - Land-Use Planning (3)
- GEOL 390 - Introduction to Groundwater (3)
- *HIST 377 - American Environmental History (3)
- MEE 101 - Energy and the Environment (3)
- PHIL 335 - Environmental Ethics (3)
- ^POLS 324 - Politics of Environmental, Health, and Safety Regulation (3)
- TECH 245 - Pollution Prevention and Sustainable Production (3)
- TECH 484 - Energy Management (3)

Additional course work outside of the department (32)

Course work in biology (8):

- BIOS 208 - Fundamentals of Cellular Biology I (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)

Course work in chemistry (8):

- CHEM 210 - General Chemistry 1 (3)
- AND CHEM 212 - General Chemistry I Laboratory (1)
- CHEM 211 - General Chemistry II (3)
- AND CHEM 213 - General Chemistry II Laboratory (1)

Course work in physics including lab (8):

- PHYS 210 - General Physics I (4)
- PHYS 211 - General Physics II (4)

Course work in math and statistics (7):

- MATH 211 - Calculus for Business and Social Science (4)
- STAT 301 - Elementary Statistics (4)

Professional education courses, including (37):

- BIOS 402X/CHEM 493X/ENVS 483X/GEOL 483/PHYS 493X - Interdisciplinary Teaching of Science in Secondary and Middle Level Education (3)
- BIOS 484X/CHEM 490X/ENVS 475X/GEOL 475/PHYS 490X - Science Across Time and Culture (2)
- ILAS 201 - Introductory Clinical Experience (1)
- ILAS 301 - Second Clinical Experience (1)
- ENVS 401 - Third Clinical High School Experience in Environmental Science (2)
- ENVS 482 - Transition to the Professional Environmental Science Teacher (2)
- ENVS 487 - Student Teaching (Secondary) in Environmental Science (10)
- ENVS 495 - Methods in Teaching Environmental Science (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)
- LTIC 420 - Methods and Materials for Teaching English Language Learners in the Content Areas (3)
- SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)

Minor in Environmental Studies (21-22)

The environmental studies minor is an interdisciplinary and multidisciplinary program that allows undergraduates in any degree program to study environmental concepts, issues, and problems from the viewpoints and with the approaches of the natural and social sciences.

Requirements (21-22)

Students must select at least seven (7) of the following courses. At least three (3) courses must be selected from the environmental studies courses, and at least one (1) course must be selected in each of the following: natural sciences, engineering, and technology courses and humanities and social sciences courses. The remaining two (2) courses must be selected from the courses listed below, if not previously used to fulfill the requirements for those categories.

Select three of the following environmental studies courses (9)

- ENVS 301 - Environmental Science I: Physical Systems (3)
- ENVS 302 - Environmental Science II: Biological Systems (3)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

*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)
 OR TECH 245 - Pollution Prevention and Sustainable Production (3)

Select from one of the following natural science, engineering, and technology courses (3-4)

BIOS 406 - Conservation Biology (4)
 ENVS 301 - Environmental Science I: Physical Systems (3)
 ENVS 302 - Environmental Science II: Biological Systems (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 Paleocology (4)
 MEE 101 - Energy and the Environment (3)
 TECH 245 - Pollution Prevention and Sustainable Production (3)
 TECH 305 - Green Technologies (3)
 OR ENVS 305X - Green Technologies (3)

Select one of the following humanities and social sciences courses (3)

^ANTH 425/^ENVS 425X - Environment and Anthropology (3)
 ECON 386 - Environmental Economics (3)
 ENVS 210 - Introduction to Sustainable Food Systems (3)
 ENVS 303 - Environment in the Social Sciences and Humanities (3)
 ENVS 304 - Environmental Law, Policy, and Economics (3)
 *HIST 377 - American Environmental History (3)
 PHIL 335 - Environmental Ethics (3)
 PHIL 338 - Philosophy of Food (3)
 POLS 220/PSPA 220X - Introduction to Public Policy (3)
 ^POLS 324 - Politics or Environmental Health and Safety Regulation (3)

Certificate of Undergraduate Study

Sustainable Food Systems (13-14)

The Certificate of Undergraduate Study in Sustainable Food Systems will provide the student with a solid foundation for work in sustainable food and farming. This interdisciplinary certificate prepares students for the variety of issues they might face working in sustainable agriculture. The certificate consists of two core courses and a choice of electives from three content areas. The courses enable practical application of knowledge and provide engaged learning opportunities.

The certificate will help prepare students in three areas of study that are all meant to provide the student with an understanding of systems: 1) Agriculture and Sustainability--study the physical systems that impact agriculture and sustainable local food options; 2) Food and Health--examine current trends in the food industry, agriculture, and community environment in relation to food sustainability, social and nutritional health and wellness; and 3) Social and Cultural--learn how society could address the social and cultural change needed to achieve more sustainable food systems.

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. The certificate courses may also be applied to satisfy requirements for B.A. and B.S. degrees.

Required Courses (4)

*ENVS 210 - Introduction to Local Sustainable Food Systems (3)
 ENVS 490 - Undergraduate Research (1)(field practicum)

One course from each of the following sections (9-10)

Agriculture and Sustainability (3-4)

*BIOS 101 - Plant Products and Human Affairs (3)
 *BIOS 103 - General Biology (3)
 *BIOS 106 - Environmental Biology (3)

*BIOS 109 - Human Biology (3)
 ENVS 301 - Environmental Science I: Physical Systems (3)
 ENVS 302 - Environmental Science II: Biological Systems (3)
 ENVS 409/BIOS 409X/GEOL 409X/PHHE 409X - Water Quality (4)
 GEOG 422/BIOS 422X - Plant-Soil Interactions (4)
 GEOG 453 - Environmental Management (3)

Food and Health (3)

GEOG 425 - Geography of Food and Agriculture (3)
 *NUTR 201 - Human Nutrition (3)
 ^NUTR 308 - Current Problems and Trends in Nutrition and Foods (3)
 NUTR 404 - Nutrition and Community Food Systems (3)
 ^*NUTR 406 - Global Food and Nutrition Issues (3)
 *PHHE 295 - Introduction to Public Health (3)
 PHHE 412 - Consumer Health (3)

Social and Cultural (3)

^ANTH 425/^ENVS 425X - Environment and Anthropology (3)
 *ENVS 303 - Environment in the Social Sciences and Humanities (3)
 **EPFE 201 - Education as an Agent for Change (3)
 *GEOG 253 - Environment and Society (3)
 HIST 366 - Farms, Food, and Rural America (3)
 **HIST 377 - American Environmental History (3)
 *NNGO 100 - Community Leadership and Civic Engagement (3)
 PHIL 338 - Philosophy of Food (3)
 ^POLS 324 - Politics of Environmental Health and Safety Regulation (3)

Course List (ENVS)

100. EXPLORING THE ENVIRONMENTAL STUDIES MAJOR (1). Discussion of different emphasis and career options. Includes advising. Internships and research opportunities on campus will be explored. Guest lectures by faculty. Library and literature research skills. S/U grading. PRQ: Declared major in environmental studies.

210. INTRODUCTION TO SUSTAINABLE FOOD SYSTEMS (3). Overview of how Illinois residents have responded to food problems through local initiatives. Examines different local food models used in DeKalb County and northern Illinois. Local public gardens will be used to explore soil science, food justice, local food, project management, public health, and environmental issues. Opportunities for several on-site visits to food production operations in the region. Two hours of lecture and three hours of laboratory work in local public gardens per week.

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.

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.

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

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.

315. GEOGRAPHY OF ENERGY (3). *Crosslisted as 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.

400. CAREERS IN ENVIRONMENTAL STUDIES (1). Exploration of career options for environmental studies majors based on emphasis. Assists students with the identification of career paths, the development of skills (e.g., resume creation, interviewing techniques, adopting professional attitudes and behavior), and provides coaching and mentoring opportunities. Graduate school and other non-traditional options will be explored. S/U grading. PRQ: Environmental studies major and junior or senior standing.

401. THIRD CLINICAL HIGH SCHOOL EXPERIENCE IN ENVIRONMENTAL SCIENCE (2). Discipline-based early clinical experience for students seeking teacher licensure in environmental 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.

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.

410. FIRE CERTIFICATION (1). Introduction and foundations of wildland fire behavior and firefighting, with focus on prescribed fire use in habitat management. Online training and field exercises leading to National Wildfire Coordinating Group (NWCG) firefighter type 2 certification in conjunction with NWCG-certified course administrator. S/U grading. CRQ: ENVS 302 or BIOS 406.

420X. WATERWORLDS (3). *Crosslisted as ANTH 420*. Exploration of water as a resource under threat and as a window into social worlds. Using crosscultural case studies, concentrates on customs, tools, and ideologies for encountering, appreciating, and controlling water as well as solutions to water scarcity, pollution, and unjust distribution. Seminar-style includes interdisciplinary readings, films, and field trip(s).

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.

425X. ENVIRONMENT AND ANTHROPOLOGY (3). *Crosslisted as ANTH 425*. 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.

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.

432X. NATURE AND THE ENVIRONMENT ACROSS CULTURES (3). *Crosslisted as ANTH 432*. Investigation of the different ways people conceptualize nature and the environment across cultures. Focus 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.

435X. GENDER AND THE ENVIRONMENT (3). *Crosslisted as WGSS 435*. Topics and issues pertaining to gender and the environment such as the role of gender and other social factors in perceptions, knowledge, and behaviors regarding the environment today and in the past; women's contributions to environmental arts and sciences; the role of gender in environmental activism and policy in the U.S. and around the globe.

444X. PRIMATE ECOLOGY AND CONSERVATION (3). *Crosslisted as ANTH 444*. 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.

450. ISSUES IN ENVIRONMENTAL STUDIES (3-6). Interdisciplinary approaches and perspectives on selected issues in environmental studies. Independent study and seminars. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

466X. RESOURCE CONFLICTS AND ENVIRONMENTAL PEACEBUILDING (3). *Crosslisted as ANTH 466*. Interdisciplinary examination of resource conflict and environmental peacebuilding through case studies around the world. Investigates how different material, geographical, and sociopolitical factors exacerbate conflicts and provide opportunities for peacebuilding. Course materials include ethnographic books, scholarly articles, news reports, and films.

475X. SCIENCE ACROSS TIME AND CULTURE (2). *Crosslisted as BIOS 484X, 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. This course is only available to educator licensure candidates. PRQ: GEOL 120 and GEOL 121, or consent of department.

481. FIELD RESEARCH IN POLITICAL ECOLOGY (6). In-depth expertise in theory and methods of the interdisciplinary field of political ecology. Includes intensive introduction to political ecology theory, followed by a mentored political ecology research project with a faculty member. Concurrent workshop gatherings for lessons and discussion of methodological issues confronted in research projects. Course work in ethnographic and/or quantitative research methodologies or demonstration of equivalent research experience expected prior to enrollment. PRQ: ANTH 460 or consent of department.

482. TRANSITION TO THE PROFESSIONAL ENVIRONMENTAL SCIENCE TEACHER (2). A transitioning experience, in which the educator 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. Reflection on the preparatory experience and completion of documentation demonstrating ability to perform as a qualified environmental science teacher. Such documentation will include, but not be limited to, the electronic portfolio, a professional development plan, and a resume. CRQ: ENVS 487 or consent of the department.

483X. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY AND MIDDLE LEVEL EDUCATION (3). *Crosslisted as BIOS 402X, 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, microteaching, construction and use of assessment rubrics, and ongoing development of a professional portfolio.

487. STUDENT TEACHING (SECONDARY) IN ENVIRONMENTAL SCIENCE (10). Assignments made by Environmental Studies. Also see "Emphasis 7, Educator Licensure" for other regulations. PRQ: ENVS 495X and consent of department.

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.

495. METHODS IN TEACHING ENVIRONMENTAL SCIENCES (3). Methods and materials and theory for teaching secondary environmental 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 environmental sciences. CRQ: ENVS 401.

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

Holly Jones, Ph.D., Yale University, associate professor in Biological Sciences
Colin Kuehl, Ph.D., University of California, Santa Barbara, assistant professor in Political Science
Melissa Lenczewski, Ph.D., University of Tennessee, associate professor in Geology and Environmental Geosciences
Kevin Martin, Ph.D., Missouri University of Science and Technology, associate professor in Technology
Emily McKee, Ph.D., University of Michigan, assistant professor in Anthropology

Department of Geographic and Atmospheric Sciences (GEOG, MET)

The Department of Geographic and Atmospheric Sciences 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, and Southeast Asian 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 three areas of study: human geography, geographic information science, or 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 (35-36)

Two of the following (7-8):

- *GEOG 101 - Introduction to Environmental Geography (3)
AND GEOG 102 - Introduction to Environmental Geography Laboratory (1)
- *GEOG 105 - Weather, Climate, and You (3)
AND GEOG 106 - Weather and Climate Laboratory (1)
- *GEOG 253 - Environment and Society (3)

Two of the following (6):

- GEOG 201 - Introduction to Human Geography (3)
 - **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.

Geographic Information Science

Course work from the following

- GEOG 360 - Earth from Space: Introduction to Remote Sensing (3)
- GEOG 391J - Internship: Methods and Techniques (1-3)
- GEOG 391K - Internship: Mapping/Geovisualization (1-3)
- GEOG 403 - Soils and Environmental Land Use Planning (3)
- GEOG 407 - Technological Hazards (3)
- GEOG 432 - GIS for Public and Environmental Health (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 464 - Location Analysis (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 Programming for the Geospatial and Atmospheric Sciences (3)
- GEOG 498J - Seminar in Current Problems: Methods and Techniques (3)
- GEOG 498K - Seminar in Current Problems: Mapping/Geovisualization (3)

Human Geography

Course work from the following

- GEOG 201 - Introduction to Human Geography (3)
- GEOG 304 - Transportation Geography (3)
- **GEOG 324X - Women in Science (3)
- GEOG 336 - Geography of Africa (3)
- GEOG 362 - Geography of Urban Systems (3)
- GEOG 391G - Internship: Urban/Economic Geography (1-3)
- GEOG 403 - Soils and Environmental Land Use Planning (3)
- GEOG 407 - Technological Hazards (3)
- GEOG 425 - Geography of Food and Agriculture
- GEOG 430 - Population Geography (3)
- GEOG 451 - Political 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 498G - Seminar in Current Problems: Urban/Economic Geography (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 360 - Earth from Space: Introduction to Remote Sensing (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)

* Available for general education credit.

^ This is a Writing Infused Course.

¹ Fulfills the Human Diversity Requirement.

¹ Students will be better prepared for this area by fulfilling the B.S. degree requirements.

300 GEOGRAPHIC AND ATMOSPHERIC SCIENCES

GEOG 403 - Soils and Environmental Land Use Planning (3)
GEOG 404 - Soil Description and Interpretation (2)
GEOG 406 - Natural Hazards and Environmental Risk (3)
GEOG 407 - Technological Hazards (3)
GEOG 408 - Tropical Environmental Hazards (3)
GEOG 413 - Forest Ecology and Management (3)
GEOG 422 - Plant-Soil Interactions (4)
GEOG 425 - Geography of Food and Agriculture (3)
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)
GEOG 498A - Seminar in Current Problems: Physical Geography (3)
GEOG 498B - Seminar in Current Problems: Environmental Management (3)

Requirements outside Department (B.A., 7-20; B.S., 10-15)

*MATH 210 - Finite Mathematics (3),
OR *MATH 211 - Calculus for Business and Social Science (4),
OR *MATH 229 - Calculus I (4)
STAT 200 - Elementary Statistics (4)

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 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: 42-56 (B.A.) OR 45-51 (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 - Introduction to Environmental Geography (3)
AND GEOG 102 - Introduction to Environmental Geography Laboratory (1)
OR
*GEOG 105 - Weather, Climate, and You (3)
AND GEOG 106 - Weather and Climate 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 360 - Earth from Space: Introduction to Remote Sensing (3)
GEOG 391M - Internship, Geomatics/Surveying (3)
GEOG 403 - Soils and Environmental 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 (16)

*MATH 211 - Calculus for Business and Social Science (4),
OR *MATH 229 - Calculus I (4)
*PHYS 210 - General Physics I (4)
*PHYS 211 - General Physics II (4)
STAT 200 - 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: 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 (28)

*GEOG 105 - Weather, Climate, and You (3)
*GEOG 106 - Weather and Climate Laboratory (1)
GEOG 300 - Proseminar (1)
MET 300 - Meteorology (4)
MET 360 - Radar Meteorology (3),
OR GEOG 360 - Earth from Space: Introduction to Remote Sensing (3)
MET 410 - Weather Dynamics I (4)
MET 411 - Weather Dynamics II (4)
MET 421 - Synoptic Meteorology (4)
MET 444 - Mesoscale Meteorology (3)
MET 475 - Practicum in Weather Analysis and Forecasting (2)
Course work from the following (6)
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 460 - Remote Sensing of the Environment (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 485 - Atmospheric Physics (3)
MET 491 - Undergraduate Research in Meteorology (1-3)

Requirements outside Department (30-31)

CSCI 240 - Computer Programming in C++ (4)
OR GEOG 493 - Computer Programming for the Geospatial and Atmospheric Sciences (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)
STAT 200 - Elementary Statistics (4)

Total Hours for a Major in Meteorology (B.S.): 64-65

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.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

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 Educator Licensure 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 Educator Licensure 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 2.67;

- passed the Test of Academic Proficiency or equivalent recognized by the ISBE;

- completed at least 6 semester hours of geography at NIU and earned a minimum GPA of 3.00 in all geography courses taken at NIU;

- 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 Educator Licensure Program.

Retention

Students admitted to the program must maintain program GPA requirements, display appropriate professional dispositions, and complete a satisfactory review of progress each semester with the History and Social Sciences Educator Licensure Program. Students must also pass any additional tests required by the ISBE for educator licensure such as the appropriate state Content Area Test (taken before student teaching) and the Teacher Performance Assessment (taken before program completion).

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 and concurrently with the Third Clinical Secondary School Experience in History/Social Sciences.

Other Requirements

Students pursuing educator licensure must take additional, approved course work in history and the social sciences to acquire the broad-based, interdisciplinary knowledge required of secondary social studies educators. Students must also complete approved professional education course work in areas such as special education methods, content-area literacy, and teaching English-language learners. Contact the History and Social Sciences Educator Licensure Program for the current list of history, social science, and education courses approved for fulfilling these requirements.

Students must also complete a three-semester sequence of pre-student teaching clinical experiences, including HIST 401, Third Clinical Secondary School Experience in History/Social Sciences, as well as 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.

Students pursuing 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.

The History and Social Sciences Educator Licensure 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 Educator Licensure Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Educator Licensure 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 - Introduction to Environmental Geography and Laboratory (4),
OR *GEOG 105 and GEOG 106 - Weather, Climate and You, and Weather and Climate Laboratory (4)
- **GEOG 202 - World Regional Geography (3),
OR GEOG 201 - Human 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 semester hours 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 Geographic and Atmospheric Sciences reserves the right to limit enrollment in any of the certificate courses.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

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 360 - Earth from Space: Introduction to Remote Sensing (3)
 GEOG 391J - Internship: Methods and Techniques (1-6)
 GEOG 391K - Internship: Mapping/Geovisualization (1-6)
 GEOG 403 - Soils and Environmental Land Use Planning (3)
 GEOG 407 - Technological Hazards (3)
 GEOG 432 - GIS for Public and Environmental Health (3)
 GEOG 455 - Land-Use Planning (3)
 GEOG 458 - Geovisualization (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 Programming for the Geospatial and Atmospheric Sciences (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. INTRODUCTION TO ENVIRONMENTAL 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.

102. INTRODUCTION TO ENVIRONMENTAL GEOGRAPHY LABORATORY (1). Selected laboratory experiments to accompany GEOG 101. Two hours of laboratory. CRQ: GEOG 101.

105. WEATHER, CLIMATE, AND YOU (3). Introduction to the science of weather and climate, including the study of solar radiation, energy transfer and the seasons, clouds and precipitation, weather systems, extreme weather, and climate variability and change. Discussion of climate impact on humans and the environment. Three hours of lecture.

106. WEATHER AND CLIMATE LABORATORY (1). Laboratory and field activities to explore weather- and climate-related phenomena. 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.

201. INTRODUCTION TO HUMAN GEOGRAPHY (3). Introduction to spatial analysis and geographic processes of our world. Through the exploration of human geography, and associated sub-disciplines (urban, political, population, economic, etc.) and what is studied by geographers in those areas (sprawl, diffusion, migration, etc.), "space" will be viewed from a new perspective, not only theoretical and abstract, but applied, as well.

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 mapping, with an emphasis on application in the geographic sciences. Concepts of maps as models, tools of visualization, and forms of graphic communication are introduced. 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 methods in transportation geography with emphasis on transportation and spatial structure, network analysis, spatial interaction modeling, urban transportation, logistics, and transportation planning. GIS applications of network optimization, location-allocation, and logistics analysis.

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 as 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 WGSS 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. IMMIGRATION (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. Principles 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.

360. EARTH FROM SPACE: INTRODUCTION TO REMOTE SENSING (3). Introduction to the principles of acquiring and interpreting data from remote sensing systems, focusing primarily on the use of aerial photography and satellite imagery to study the environment. Physical processes involved in remote sensing including electromagnetic radiation and its interaction with atmosphere and land surface; common remote sensing systems; basic principles of photogrammetry. Lecture and laboratory.

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 200.

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. CRQ: STAT 200.

382. GEOGRAPHY OF DISEASE AND HEALTH (3). Geographic dimensions of health in local and regional populations across the globe with a regional foci on Southeast Asia, Africa, and the Americas. 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 and ethnomedicine, concepts of health and place, and therapeutic spaces.

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.

403. SOILS AND ENVIRONMENTAL LAND USE PLANNING (3). Application of soil science to environmental issues; use of geospatial data in mapping and utilizing the soil resource in agricultural, urban, and natural systems; use of soils information in wetland delineations, waste disposal, nutrient and contaminant cycling, erosion-sedimentation, ecological restoration, and environmental quality. Professional ethics, certification, and licensing of soil scientists.

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. TECHNOLOGICAL HAZARDS (3). Study of the spatial problems associated with technological (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 technological 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.

425. GEOGRAPHY OF FOOD AND AGRICULTURE (3). Geographic patterns, food production, and distribution systems. Examination of major environmental challenges inherent in the global food system. Includes global agricultural systems, global food security, industrial and alternative agricultural systems, and the impacts of agriculture on the environment.

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. GIS FOR PUBLIC AND ENVIRONMENTAL HEALTH (3). Geographic Information Science applications in public and environmental health scenarios. Measurement in vital statistics, surveillance data, collected field data, and monitoring will be covered with an introduction to health metrics for comparative population health studies. 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.

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). Computer-based methods for extracting useful information from remotely sensed data for geoscience/environmental applications; principles of digital image processing techniques including radiometric and geometric correction, image enhancement, image classification, and change detection; principles of the latest remote sensing technologies and their applications: LIDAR and GRACE. Lecture and laboratory. PRQ: MATH 210 or MATH 211 or MATH 229, and GEOG 360 or MET 360.

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 200.

462X. BIOGEOGRAPHY (3). *Crosslisted as BIOS 462*. 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. 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. CRQ: GEOG 459 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 200, 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 PROGRAMMING FOR THE GEOSPATIAL AND ATMOSPHERIC SCIENCES (3). Introductory programming techniques used to process and visualize geospatial data. Programming in Python, basic program logic and control structures in that language, development of programmatic extensions for GIS software (e.g. ArcGIS), integration of Python with open source scientific programming packages. No prior programming experience is required. Lecture and laboratory. PRQ: GEOG 459 or CSCI 240 or consent of department.

496X. HISTORY AND SOCIAL SCIENCE INSTRUCTION FOR SECONDARY AND MIDDLE GRADES 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 middle grades and secondary levels. PRQ: Admission to the history or social science secondary or middle grades educator licensure program and permission of the Department of History's office of secondary educator licensure.

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 Geographic and Atmospheric Sciences. 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.

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. CRQ: 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 240 or GEOG 493.

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. **SYNOPTIC METEOROLOGY (4).** 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. Three hours of lecture and two hours of laboratory. PRQ: MET 300. CRQ: MET 360 or GEOG 360.

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 240; or GEOG 493; 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 300.

475. **PRACTICUM IN WEATHER ANALYSIS AND FORECASTING (1).** Application of meteorological observations, numerical weather prediction models, and synoptic and mesoscale analysis and forecasting techniques to produce site-specific weather forecasts. Involves one hour of lecture. May be repeated to a maximum of four semester hours but only two semester hours will count toward the degree. PRQ: MET 300.

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.

Geographic and Atmospheric Sciences Faculty

David Changnon, Ph.D., Colorado State University, Distinguished Teaching Professor, Board of Trustees Professor, chair

Walker S. Ashley, Ph.D., University of Georgia, associate professor

Xuwei Chen, Ph.D., Texas State University, professor

Courtney M. Gallaher, Ph.D., Michigan State University, associate professor

Ryan D. James, Ph.D., University of North Carolina, Charlotte, assistant professor

Michael E. Konen, Ph.D., Iowa State University, associate professor

Andrew J. Kremenec, Ph.D., Indiana University, professor

Wei Luo, Ph.D., Washington University, professor

Thomas J. Pingel, Ph.D., University of California, Santa Barbara, assistant 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 (42)

*GEOL 120 - Planet Earth (3), and *GEOL 121 - Planet Earth Laboratory (1)
 GEOL 200 - Geoscience Career Preparation (1)
 GEOL 325 - Solid Earth Composition (4)
 GEOL 330 - Global Cycles (4)
 GEOL 335 - Dynamics and Structure of the Earth (4)
 GEOL 375 - Technology Applications in Geoscience (2)
 GEOL 405 - Sedimentology and Stratigraphy (4)
 GEOL 478¹ - Geoscientific Field Techniques I (2)
 AND GEOL 479¹ - Geoscientific Field Techniques II (2)
 OR GEOL 477¹ - Field Methods in Environmental Geosciences (4)

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)
 OR *MATH 211 - Calculus for Business and Social Science (4),
 AND STAT 200 - Elementary Statistics (4)
 *PHYS 210 - General Physics I (4)
 OR *PHYS 253 - Fundamentals of Physics I: Mechanics (4)
 AND *PHYS 211 - General Physics II (4)
 OR *PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
 OR BIOS 103 - General Biology (3)
 AND BIOS 105 - General Biology Laboratory (1)
 AND BIOS 209 - Fundamentals of Organismal Biology (3)
 AND BIOS 211 - Fundamentals of Organismal Biology Laboratory (1)

Total Hours for Emphasis 1, Geology: 66

Emphasis 2. Environmental Geosciences

Requirements in Department (36-39)

*GEOL 120 - Planet Earth (3), and *GEOL 121 - Planet Earth Laboratory (1)
 GEOL 200 - Geoscience Career Preparation (1)
 GEOL 325 - Solid Earth Composition (4)
 GEOL 330 - Global Cycles (4)
 GEOL 335 - Dynamics and Structure of the Earth (4)
 GEOL 375 - Technology Applications in Geoscience (2)
 GEOL 405 - Sedimentology and Stratigraphy (4)
 ^GEOL 477¹ - Field Methods in Environmental Geosciences (4),
 OR GEOL 478¹ - Geoscientific Field Techniques I (2)
 AND GEOL 479¹ - Geoscientific Field Techniques II (2)
 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 (33-36)

*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 (4),
 AND STAT 200 - Elementary Statistics (4)

* Available for general education credit.

¹ This is a Writing Infused Course.

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.

- *PHYS 210 - General Physics I (4)
 OR *PHYS 253 - Fundamentals of Physics I: Mechanics (4)
 AND *PHYS 211- General Physics II (4)
 OR *PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
 OR BIOS 103 - General Biology (3)
 AND BIOS 105 - General Biology Laboratory (1)
 AND BIOS 209 - Fundamentals of Organismal Biology (3)
 AND BIOS 211- Fundamentals of Organismal Biology Laboratory (1)

Upper-division course work selected from the following list of courses (9-12):

- ANTH 425 - Environment and Anthropology (3)
 ANTH 432 - Nature and Environment Across Cultures (3)
 ANTH 445 -Primate Evolution (3)
 BIOS 415 - Water Microbiology (3)
 BIOS 442 - Evolution and the Creationist Challenge (3)
 ECON 301 - Labor Problems (3)
 ECON 386 - Environmental Economics (3)
 ENVS 301 - Environmental Sciences I: Physical Systems (3)
 ENVS 302 - Environmental Science II: Biological Systems (3)
 ENVS 304 - Environmental Law, Policy, and Economics (3)
 GEOG 302 - Soil Science (4)
 GEOG 303 - Water Resources and the Environment (3)
 GEOG 306 - Severe and Hazardous Weather (3)
 GEOG 359 - Introduction to Geographic Information Systems (3)
 GEOG 368 - Climate Change: Science, Impacts, And Mitigation (3)
 GEOG 403 - Soils and Environmental Land Use Planning (3)
 GEOG 404 - Soil Description and Interpretation (2)
 GEOG 406 - Natural Hazards and Environmental Risk (3)
 GEOG 453 - Environmental Management (3)
 GEOG 455 - Land-Use Planning (3)
 ^GEOG 464 - Location Analysis (3)
 GEOG 498 - Seminar in Current Problems (3)
 PHHE 351 - Elements of Environmental Health (3)
 ^POLS 324 - Politics of Environmental Health and Safety Regulation (3)

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: 69-75

Emphasis 3. Earth and Space Science Education^{1,2}

Requirements in Department (37)

- *GEOL 103 – Planetary and Space Science (3),
 OR *PHYS 162 – Elementary Astronomy (3)
 *GEOL 120 - Planet Earth (3), and *GEOL 121 - Planet Earth Laboratory (1)
 GEOL 200 - Geoscience Career Preparation (1)
 GEOL 325 - Solid Earth Composition (4)
 GEOL 330 - Global Cycles (4)
 GEOL 335 - Dynamics and Structure of the Earth (4)
 GEOL 401 - Third Clinical High School/Middle School Experience in Earth and Space Science (2)
 GEOL 405 - Sedimentology and Stratigraphy (4)
 GEOL 429 - Inquiry-Based Field Experiences for Earth Science Teachers (3)
 GEOL 475 - Science Across Time and Culture(2)
 GEOL 483 - Interdisciplinary Teaching of Science in Secondary Education (3)
 GEOL 495X - Teaching of Physical Sciences (3)

Additional Requirements for Earth and Space Science Education (6)

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 (6)

Total Requirements in Department (43)

Requirements outside Department (47-53)

- 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)
 *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)
 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)
 *GEOG 105 - Weather, Climate, and You (3)
 AND GEOG 106 - Weather and Climate Laboratory (1)
 ILAS 201 - Introductory Clinical Experience (1)
 ILAS 301 - Second Clinical Experience (1)
 *MATH 229 - Calculus I (4),
 OR *MATH 155 - Trigonometry and Elementary Functions (3),
 AND MATH 211 - Calculus for Business and Social Science (4),
 AND STAT 200 - Elementary Statistics (4)
 *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)
 *PSYC 102 - Introduction to Psychology (3)
 SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)

Total Hours for Emphasis 3, Earth and Space Science Education: 90-96

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 in earth and space 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.

Because licensure requires additional courses beyond the major, consulting the coordinator before registering for the initial term will facilitate expeditious completion of the program.

Students seeking licensure will also major in geology and environmental geosciences unless they already hold a baccalaureate or higher degree in that discipline.

* Available for general education credit.

^ This is a Writing Infused Course.

¹ With prior approval from a departmental undergraduate advisor, students may substitute field courses taken at other universities as long as those courses carry a combined credit hour total of at least 4 credit hours.

² Additional courses may be substituted with written approval of the departmental undergraduate adviser.

Students are responsible for timely submission of the several applications and permits required during the program.

Undergraduate geology majors may apply for admission to educator licensure in Earth and Space Science at the end of their sophomore year, except in the case of transfer students who normally apply at the end of their first semester at NIU.

Students³ transferring geology course credits from other institutions will complete additional NIU courses as determined by the departmental licensure coordinator.

Students who already possess a baccalaureate or higher degree and wish to pursue licensure without becoming a candidate for a degree should consult with the geology licensure adviser as early as possible to plan a course of study.

Admission Requirements¹

Students will be admitted to the licensure program when they have:

Submitted an application in writing to the departmental licensure coordinator.

Completed *COMS 100, *ENGL 103, *ENGL 203, *MATH 155, *PSYC 102 with a grade of C or better (higher numbered courses may be substituted, if approved by the coordinator); and 16 semester hours in geology and environmental geosciences courses numbered 300 and above.

Earned a minimum GPA of 2.50 in all work at NIU.

Earned a minimum combined GPA of 2.70 in NIU courses numbered 200 and above in physical and biological sciences and mathematics.

Completed a satisfactory interview with the coordinator in which the student demonstrates attitudes and motivations appropriate to the professional educator.

Obtained approval from the department's office of teacher licensure.

Retention Requirements¹

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the department's office of educator licensure.

A grade of C or better is required in all course work listed for the Earth Science Education degree and educator licensure.

Completion Requirements

Earth and Space Science Educator Licensure

All requirements listed in Emphasis 3, Earth and Space Science Education and the following:

GEOL 482 - Transition to the Professional Earth and Space Science Teacher (2)

GEOL 487 - Student Teaching High School/Middle School Earth and Space Science (10)

GEOL 495X - Teaching of Physical Sciences (3)

LTIC 420 - Methods and Materials for Teaching English to Speakers of Other Languages in Content Areas (3)

Except in unusual circumstances GEOL 401 and GEOL 495X must be taken in the semester immediately prior to enrollment in GEOL 487 and students are admitted to GEOL 487 only upon successful completion of the course work required for graduation and licensure. In addition, students must pass the ILTS Subject Matter test before student teaching.

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 for the Illinois State Board of Education web page.

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 - Planet Earth (3),

AND GEOL 121 - Planet Earth Laboratory (1)

GEOL 325 - Solid Earth Composition (4)

^GEOL 330 - Global Cycles (4)

GEOL 335 - Dynamics and Structure of the Earth (4)

GEOL 405 - Sedimentology and Stratigraphy (4)

Six or more semester hours in the minor must be taken at NIU.

Course List

101. GEOLOGY OF THE NATIONAL PARKS (3). Exploration of the most distinctive and intriguing features of America's National Parks in a geologic context. Focus on the origin and evolution of landforms in various national parks and the geologic processes that created and sculpted them. National Parks serve discussions on society's impact on the lithosphere, hydrosphere, atmosphere, and biosphere.

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.

105. GEOLOGIC RESOURCES AND THE ENVIRONMENT (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.

* Available for general education credit.

^ This is a Writing Infused Course.

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.

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.

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

200. **GEOSCIENCE CAREER PREPARATION (1).** Development of professional skills and attitudes necessary for employment in geoscience-related fields. Topics include résumé creation, interviewing techniques, professional networking, technical writing, personal marketing, and career path identification. PRQ: Declared major in geology and environmental geosciences.

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.

303. **DIAMONDS, GEMS, AND OTHER PRECIOUS STONES (3).** Origin, occurrence, and physical properties of diamonds and other common gem minerals. Physical properties of the gems will be related to their chemistries, crystal structures, and optical characteristics. Methods and instruments used in the determination of a gem will also be presented. Includes discussion of social impacts of gemstone mining, as well as recent advances in the production of synthetic gems, and how to distinguish them from natural samples.

304. **DIAMONDS, GEMS, AND OTHER PRECIOUS STONES LABORATORY (1).** Hands-on analyses of select gem minerals and the techniques used to characterize gems. Designed to accompany GEOL 303. One two-hour period per week. CRQ: GEOL 303.

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: 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.

375. **TECHNOLOGY APPLICATIONS IN GEOSCIENCE (2).** Applied training in software and hardware used in the collection, organization, evaluation, manipulation and presentation of common field geoscientific data. Field work collecting original data using mobile devices, handheld GPS, and when possible, unmanned aerial vehicles. Includes required one- to three-day field trips or extended one- to two-week field excursions. PRQ: GEOL 120 and GEOL 121 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. THIRD CLINICAL HIGH SCHOOL/MIDDLE SCHOOL EXPERIENCE IN EARTH AND SPACE SCIENCE (2). 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 (4). 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. SEDIMENTOLOGY AND STRATIGRAPHY (4). Introduction to sedimentary rocks (texture, structure, composition, and interpretation) and methods of stratigraphic data gathering and analysis. Emphasis on depositional processes, sedimentary facies, and analysis of different environments and depositional systems. 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. Consists of 3 hours of lecture and 2 hours of lab per week. PRQ: 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.

408. HAZWOPER CERTIFICATION (1). Hazardous waste operations and emergency response (HAZWOPER) certification is specifically designed for workers who are involved in clean-up operations, voluntary clean-up operations, emergency response operations, and storage, disposal, or treatment of hazardous substances or uncontrolled hazardous waste sites. Covers topics included in 29 CFR 1910.120. Junior or senior standing required. S/U grading.

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 licensure. 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 magnetism 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, ENVS 475X, 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). Immersive training 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, environmental surface geophysics, site evaluation and techniques, and regional landscape history and environmental change. Multiple field trips and frequent, outdoor physical activity are required. PRQ: GEOL 375, GEOL 390, or GEOL 490; or consent of department.

478. GEOSCIENTIFIC FIELD TECHNIQUES (2). Immersive field experience that provides basic training in the integrative skills of systematic observation, data collection, description and interpretation of geological maps of lightly to moderately deformed regions dominated by sedimentary rocks. May involve up to two and a half weeks of travel to remote areas and physically demanding outdoor activities. PRQ: GEOL 335, GEOL 375, and GEOL 405; or consent of department.

479. GEOSCIENTIFIC FIELD TECHNIQUES II (2). Immersive field experience that provides intermediate and advanced training in the integrative skills of systematic observation, data collection, description and interpretation of geological processes, materials and features. Focus on creating and interpreting geological maps of moderately to highly deformed regions containing sedimentary, igneous and metamorphic rocks. May involve up to two and a half weeks of travel to remote areas and physically demanding outdoor activities. PRQ: GEOL 478 or consent of department.

481. SEDIMENTARY PETROLOGY (3). Emphasis on laboratory analysis of siliciclastic and carbonate rocks to determine depositional and diagenetic histories. Lectures and two-hour laboratory per week. PRQ: GEOL 325 and GEOL 330, or consent of department.

482. TRANSITION TO THE PROFESSIONAL EARTH AND SPACE SCIENCE 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. 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 AND MIDDLE LEVEL EDUCATION (3). *Crosslisted as BIOS 402X, CHEM 493X, ENVS 483X, 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 HIGH SCHOOL/MIDDLE SCHOOL EARTH AND SPACE SCIENCE (7-10). 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 CHEM 495X and 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: CHEM 401 or GEOL 401 or PHYS 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.

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

Ross D. Powell, Ph.D., The Ohio State University, Distinguished Research Professor, Board of Trustees Professor

Reed P. Scherer, Ph.D., The Ohio State University, Distinguished Research Professor, Board of Trustees Professor

Nathan D. Stansell, Ph.D., University of Pittsburgh, associate professor

Geology and Environmental Geosciences Faculty

Mark P. Fischer, Ph.D., Pennsylvania State University, professor, chair

Jonathan H. Berg, Ph.D., University of Massachusetts, Distinguished Research Professor, professor emeritus

Phillip J. Carpenter, Ph.D., New Mexico Institute of Mining and Technology, professor

Justin P. Dodd, Ph.D., University of New Mexico, associate professor

Mark R. Frank, Ph.D., University of Maryland, professor

Nicole D. LaDue, Ph.D., Michigan State 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)

Students must successfully complete HIST 395, and at least one 400-level NIU history course (excluding HIST 400 and HIST 49) before taking HIST 495. At least two such 400-level NIU history courses (excluding HIST 400 and HIST 495) are required to complete the major.

**HIST 260 - American History to 1865 (3)

**HIST 261 - American History since 1865 (3)

HIST 395 - Historical Methods (3) (Required of all majors in their sophomore or junior year.)

HIST 495 - Senior Thesis (4)

Two of the following (6)

**HIST 110 - History of the Western World I: Problems in the Human Past (3)

**HIST 112 - History of the Western World II: Problems in the Human Past (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)

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.

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 381, HIST 391A, ^HIST 407,

*HIST 408, ^HIST 414, ^HIST 416, HIST 420, HIST 421, ^HIST 422, HIST 456, ^HIST 458, ^HIST 459, HIST 491A, HIST 491B)

Group B: (^HIST 339, HIST 341, ^HIST 343, HIST 345, ^HIST 346, **HIST 349, ^HIST 351, *HIST 352, ^HIST 353, ^HIST 382, **HIST 383, ^HIST 386, ^HIST 387, ^HIST 388, HIST 389, HIST 391B, ^HIST 402, HIST 428, ^HIST 440, ^HIST 441, ^HIST 442, HIST 443, ^HIST 444, ^HIST 445, ^HIST 447, HIST 449, ^HIST 481, HIST 482, ^HIST 484, ^HIST 486, HIST 487, HIST 491G, HIST 491J, HIST 491N, HIST 491R, HIST 491U)

Group C: (HIST 312, ^HIST 322, HIST 324, HIST 326, HIST 327, HIST 328, HIST 337, ^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 391C, ^HIST 402, HIST 418, ^HIST 423, HIST 425, ^HIST 429, ^HIST 434, ^HIST 435, ^HIST 452, HIST 454, ^HIST 461, ^HIST 464, ^HIST 465, HIST 466, ^HIST 467, ^HIST 468, ^HIST 471, HIST 474, ^HIST 475, ^HIST 476, ^HIST 477, HIST 491C, HIST 491D, HIST 491E, HIST 491M)

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.)

Accelerated B.A. or B.S./J.D. Program in History and the College of Law

The six-year accelerated program leads to either the B.A. or B.S. in History and J.D. degrees. Students who wish to complete this program must identify themselves to the History Department as majors who wish to complete the accelerated program. All undergraduates who major in history and have completed at least 90 credit hours of undergraduate course work (including all general education and major requirements as well as the requirements for a B.A. or B.S. degree with the exception of HIST 495) with a minimum GPA of 3.25 are eligible to apply for admission to NIU's College of Law under the special provisions of this program. HIST 495 is required and must be completed no later than the first semester of the fourth year. As part of the application to the College of Law, applicants must take the LSAT and earn a score at or above the 50th percentile of the previous year's matriculating law class. Applicants are advised to take the LSAT and submit their application to the College of Law no later than February of their junior year. Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the College of Law in general, as well as other factors normally considered in admissions decisions by the College of Law.

Curriculum

Students accepted into the College of Law pursuant to this program will start taking law classes at the beginning of their fourth year. Up to 30 credits of law courses will be counted toward the bachelor's degree. It is expected that students will have satisfied the HIST 495 requirement before the beginning of the fifth year. After completing all laws degree requirements in the College of Law, students will receive their Juris Doctor degree.

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 Educator Licensure 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 Educator Licensure Program when they have:

established a file with the History and Social Sciences Educator Licensure 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 2.67;

passed the Test of Academic Proficiency or equivalent recognized by the ISBE;

completed at least 6 semester hours of history at NIU and earned a minimum GPA of 3.00 in all history courses taken at NIU;

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

met all other Illinois State Board of Education (ISBE) requirements for admission to an educator licensure program; completed the foundational studies requirements in writing and oral communication; and

obtained approval from the History and Social Sciences Educator Licensure Program.

Retention

Students admitted to the program must maintain program GPA requirements, display appropriate professional dispositions, and complete a satisfactory review of progress each semester with the History and Social Sciences Educator Licensure Program. Students must also pass any additional tests required by the ISBE for educator licensure such as the appropriate state Content Area Test (taken before student teaching) and the Teacher Performance Assessment (taken before program completion).

Department Requirements

Students must complete the requirements for a degree in history. They also must complete HIST 496, History and Social Science Instruction for Secondary and Middle Grades 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 concurrently with the Third Clinical Secondary School Experience in History/Social Sciences. Students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and licensure.

Other Requirements

Students pursuing educator licensure must take additional, approved course work in history and the social sciences to acquire the broad-based, interdisciplinary knowledge required of secondary social studies educators. Students must also complete approved professional education course work in areas such as special education methods, content-area literacy, and teaching English-language learners. Contact the History and Social Science Educator Licensure Program for the current list of history, social science, and education courses approved for fulfilling these requirements.

Students must also complete a three-semester sequence of pre-student teaching clinical experiences, including HIST 401, Third Clinical Secondary School Experience in History/Social Sciences, as well as 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.

Students pursuing 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.

The History and Social Sciences Educator Licensure 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 Educator Licensure Program to determine the necessary requirements to obtain educator licensure.

Placements

The History and Social Sciences Educator Licensure 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, taking a graduate course as an undergraduate, 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 (0-12)

- **HIST 110 - History of the Western World I: Problems in the Human Past (3)
- **HIST 112 - History of the Western World II: Problems in the Human Past (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 364 - African-American History to 1865 (3)
- *HIST 365 - African-American History Since 1865 (3)

Electives at the 300-400 level (6-18)

At least 6-18 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. HISTORY OF THE WESTERN WORLD I: PROBLEMS IN THE HUMAN PAST (3). Examination and interpretation of major historical problems in the ancient and medieval West before ca. 1500. Emphasis varies by instructor.

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. PRQ: Consent of department.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

112. HISTORY OF THE WESTERN WORLD II: PROBLEMS IN THE HUMAN PAST (3). Examination and interpretation of major historical problems in Europe and the Western world after ca. 1500. Emphasis varies by instructor.

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.

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. FROM ALEXANDER THE GREAT TO THE RISE OF ROME (3). Survey of the Mediterranean World from the rise of the Macedonian Empire in the late fourth century BCE through the ascendancy of Rome—a multicultural, multilingual world in which different societies thrived during the rise and fall of empires. Themes include the conquests of Alexander the Great, the Hellenistic kingdoms, the formation of the Roman and Carthaginian empires, and the eventual Roman hegemony by the first century BCE.

303. IMPERIAL ROME (3). History of the Roman Empire from the age of Augustus through the third century CE. Themes include the rise of autocracy in Rome, the consolidation of Roman territorial expansion, the formation of an imperial society, the adaptation and resistance to Roman culture and political power, the economy of imperial Rome, and the relationship of the Empire with so-called barbarians.

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. EARLY MIDDLE AGES (3). Survey of society, culture, religion, politics, and intellectual life during the early Middle Ages (c. 500 - c. 1000). Geographic coverage includes Europe, the Byzantine Empire, and the Islamic Caliphate.

306. LATER MIDDLE AGES (3). Continuation of HIST 305. Survey of society, culture, religion, politics, and intellectual life during the later Middle Ages (c. 1000 - c. 1500). Geographic coverage includes Europe, the Byzantine Empire, and the Islamic Caliphate.

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.

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. RUSSIA TO 1861 (3). History of the Russian Empire from its medieval origins to the middle of the nineteenth century. Topics include imperial expansion, cultural identities, and social relations.

337. RUSSIAN SINCE 1861 (3). History of late imperial Russia, the Soviet Union, and the post-Soviet successor states since 1861. Topics include revolutionary upheavals, social experience, and political reforms.

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 TANG 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. AFRICAN-AMERICAN HISTORY 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.
365. AFRICAN-AMERICAN HISTORY 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.
366. FARMS, FOOD, AND RURAL AMERICA (3). Introduction to the history of United States agriculture from the colonial period through today. Topics include adoption of technologies, crop choices, commodity markets, political affiliations, interactions within agricultural communities, relationship to governments, impact on the environment, and development of industrialized agriculture.
367. U.S. LGBT HISTORY (3). Formation of modern lesbian, gay, bisexual, and transgender (LGBT) identities, political movements, cultures, and communities in the United States from the 17th to 21st centuries. Topics include the shifting line between "normal" and "queer" sexualities and gender identities as well as average and influential LGBT Americans.
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. Exploration of the meanings of specific events to understand the role of conflict in American life, their causes, and long-term significance.

374. LATINOS/AS IN THE UNITED STATES (3). A political, social, and cultural survey of Latinos/as in the United States. Themes include colonization, immigration, race and ethnicity, gender and sexuality, religion, education, language, labor, politics, and popular culture 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. U.S. CAPITALISM AND ITS CRITICS (3). Historical development of capitalism as it developed in the United States, as well as the global influence of U.S.-based capitalism. Explores ideas, institutions, groups, and critics in each period.

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.

384. HISTORY OF WAR SINCE 1500 (3). Examination of war and conflict in world history from 1500 to the present.

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. THE CUBAN REVOLUTION AND ITS LEGACY (3). History of the Cuban Revolution in the mid twentieth century and its long-term effects on Latin America, Africa, Southeast Asia, the United States, and Soviet Union. Emphasis on methods of insurgency and contributions to democratic politics and nation building for countries in the Third World.

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.

391. TOPICS IN HISTORY (3).

A. Group A

B. Group B

C. Group C

Selected themes that fit one of the three distribution groups required for majors. Topics announced. May be repeated when subject matter varies up to a maximum of 15 semester hours.

395. 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.

396. 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 educator licensure 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.
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. Subjects include the visual arts, literature, popular and mass culture, intellectual responses to violence, cultural representations of race and gender identity 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.
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.
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).** History of Russia's revolutionary upheavals in the early 20th century. Emphasis on the multiple and conflicting ways that participants and scholars have sought to make sense of the revolution.
435. **STALINISM (3).** History of the Soviet Union under the dictatorship of Joseph Stalin, 1928-1953. Topics include rapid industrialization, collectivization, state terror, communist culture, the gulag, World War II, and the early Cold War.
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.
447. **HISTORY OF BURMA (3).** History and culture of Burma from prehistoric times to the present.
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. **BRITISH EMPIRE (3).** History of the British Empire, with a particular focus on developments from 1750 to the present. Topics include the relationship between economic change and imperial expansion and decline, gender, race, the role of violence, nationalism and decolonization.
454. **VICTORIAN BRITAIN (3).** Cultural, political and social developments in nineteenth-century Britain. Topics include class formation, gender, religion and social norms, shifting notions of politics and the state and imperial expansion.
456. **ANCIENT MEDITERRANEAN (3).** History of the ancient Mediterranean world to c. 700 CE. Topics include rise of agriculture, cities, and navigation; palace and temple societies, city-states, tribal groups; the formation of maritime empires, and kingdoms; and unification under the Roman Empire until its "fall."
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.

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.

464. CIVIL WAR ERA (3). Examines the causes and consequences of the American Civil War. Topics include race and slavery in the early republic, the development of antislavery and proslavery ideologies, territorial expansion, and the history and legacy of war and Reconstruction.

465. GILDED AGE AND PROGRESSIVE ERA (3). Examines the impact of industrialization and urbanization on vital aspects of American life and society. Topics include racial conflict, imperialism and war, the rise of organized labor, immigration, westward expansion, and social and political reform.

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.

474. IMMIGRATION IN THE UNITED STATES (3). Survey of immigration in United States history from the colonial era to the present. Comparative analysis of European, Latino, and Asian immigration; law and policy; labor and economics; nativism and xenophobia; refugees and migrants; class, ethnicity, gender, and race; and immigrant communities and identities.

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.

480. SPIES, LIES AND SECRET WARS: CIA IN THE WORLD (3). Involvement of the Central Intelligence Agency (CIA) with various peoples, governments and events around the globe.

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.

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.

486. INEQUALITY 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 the challenges faced by Latin American countries in addressing poverty and inequality, 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.

491. 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 AND MIDDLE GRADES 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 middle grades and secondary levels. PRQ: Admission to the history or social science secondary or middle grades educator licensure education program and permission of the Department of History's office of secondary educator licensure education.

History Faculty

Valerie L. Garver, Ph.D., University of Virginia, professor, chair
 Christina Abreu, Ph.D., Purdue University, associate professor
 Anita M. Andrew, Ph.D., University of Minnesota, associate professor
 Stanley Arnold, Ph.D., Temple University, associate professor
 E. Taylor Atkins, Ph.D., University of Illinois, Distinguished Teaching Professor
 Bradley Bond, Ph.D., Louisiana State University, associate professor
 Andrew Bruno, Ph.D., University of Illinois, associate 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, professor
 Heide Fehrenbach, Ph.D., Rutgers University, Distinguished Research Professor, Board of Trustees Professor
 Damián Fernández, Ph.D., Princeton University, associate professor
 Rosemary Feurer, Ph.D., Washington University, associate professor
 Aaron S. Fogleman, Ph.D., University of Michigan, Presidential Research Professor
 Eric Hall, Ph.D., Purdue University, associate professor
 Anne G. Hanley, Ph.D., Stanford University, 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, professor
 Eric Jones, Ph.D., University of California, Berkeley, associate professor
 Natalie Joy, Ph.D., University of California, Los Angeles, associate professor
 Emma Kuby, Ph.D., Cornell University, associate professor
 Vera Lind, D. Phil., Christian-Albrechts-Universität Kiel, associate professor
 Amanda Littauer, Ph.D., University of California, Berkeley, associate professor
 Eric W. Mogren, Ph.D., University of Michigan, associate professor
 Ismael Montana, Ph.D., York University, associate professor
 Brian Sandberg, Ph.D., University of Illinois, professor
 James D. Schmidt, Ph.D., Rice University, Presidential Teaching Professor
 Andrea Smalley, Ph.D., Northern Illinois University, associate professor
 J. Harvey Smith, Ph.D., University of Wisconsin, associate 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, and mathematics education. Students who successfully complete the program and pass the state mandated Teacher Performance Assessment will have completed all required Illinois State Board of Education (ISBE) and Council for the Accreditation of Educator Preparation (CAEP) standards for receiving university recommendation for licensure to teach mathematics at the 9-12 grade levels. Successful completion of the program without receipt of a passing score on the state mandated Teacher Performance Assessment will result in the student receiving a degree without university recommendation for licensure.

The department also offers minors in mathematical sciences and elementary mathematics education. 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.

Several of the department's courses fulfill the university quantitative literacy foundational studies requirement, and others can be used by non-majors toward fulfilling the nature and technology knowledge domain 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.

Department Requirements

Students majoring or minoring in mathematical sciences must obtain a minimum GPA of 2.00 in those MATH/STAT courses applicable to that major or minor. Courses not applicable to the major or minor are identified in the course descriptions. Some emphases and programs may have a higher GPA requirement; see the appropriate section of the catalog.

All majors are required to have a satisfactory portfolio of work done during their undergraduate studies on file in the Department of Mathematical Sciences. The contents of the portfolio are to be used to assess the department's program and are to be accumulated largely through course work assignments and examinations; students are expected to cooperate with instructors as these items are collected. In addition, each student must submit in his or her senior year a 250-300 word typed essay describing the student's experience in the major, including comments on the connections of mathematics with other disciplines. Details on the submission of materials and approval of the portfolio should be obtained from the student's adviser in the Department of Mathematical Sciences.

Mathematics Placement Examination Policy

Students who plan to take MATH 110, MATH 155, MATH 206, MATH 210, MATH 211, or MATH 229, and do not meet the prerequisite requirements, 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 https://www.niu.edu/effectiveness/_files/outcomes/clas/mathematical-sciences-bs.pdf.

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 336 - Ordinary Differential Equations (3)
 ^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)
 Two additional courses from MATH courses numbered above MATH 333 or STAT courses numbered above 299 (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 (37-40)

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)

* Available for general education credit.

^ This is a Writing Infused Course.

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 400 - Probability (3)
- STAT 401 - Stochastic Processes I (4)

One additional MATH/STAT course numbered above MATH 333 (3-4)

Requirements outside Department (7)

- CSCI 230 - Computer Programming in FORTRAN (4),
OR CSCI 240 - Computer Programming in C++ (4)
- STAT 300 - Introduction to Probability and Statistics (3)

Total Hours for Emphasis 2, Applied MathematicsI: 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 (37-38)

- 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)
- 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 435 - Regression Analysis (3)
- One additional course from CSCI 340 (4), and CSCI 464 (4), and MATH/STAT courses numbered above 333 (3-4)

Requirements outside Department (7)

- CSCI 230 - Computer Programming in FORTRAN (4),
OR CSCI 240 - Computer Programming in C++ (4)
- STAT 300 - Introduction to Probability and Statistics (3)

Total Hours for Emphasis 3, Computational Mathematics: 44-45

Emphasis 4. Mathematics Education

To be licensed to teach secondary school mathematics (9-12 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. Students who successfully complete the program and pass the state mandated Teacher Performance Assessment will have completed all required ISBE standards for receiving university recommendation for licensure to teach mathematics at the 9-12 grade levels. 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 (40)

- *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 401¹ - Clinical Secondary School Experience in Mathematics (1-2)
OR MATH 419 - Secondary School Mathematics Clinical Experience (0)
- ^MATH 410 - Methods of Instruction in the Mathematics Curriculum for the Middle School II (3)
OR ^MATH 411 - Methods of Instruction in the Mathematics Curriculum for Secondary School I (3)
- MATH 412 - Methods of Instruction in the Mathematics Curriculum for Secondary School II (3)
- MATH 413² - Student Teaching (Secondary) in Mathematics (7-12)
- MATH 420 - Abstract Algebra I (3)
- MATH 430 - Advanced Calculus I (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 336 - Ordinary Differential Equations (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 400 - Probability (3)

Requirements outside Department (6-7)

- 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)
- STAT 300 - Introduction to Probability and Statistics (3)

Recommendations

- Courses in chemistry and physics with at least one laboratory course. These courses satisfy the Nature and Technology general education requirement.
- ENGL 350, which satisfies a Creativity and Critical Analysis general education requirement.

Total Hours for Emphasis 4, Mathematics Education: 46-47

* Available for general education credit.

^ This is a Writing Infused Course.

¹ If MATH 401 is not completed at the student teaching school, MATH 419, Secondary School Mathematics Clinical Experience (0), may be required.

² 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.

Special Departmental Requirements for Licensure

Admission Requirements

Students are admitted to the Secondary Mathematics Educator Licensure Program when they have:

- Established an advising file with the Secondary Mathematics Educator Licensure Program and completed satisfactory reviews of progress each semester after establishment of the file;
- Completed at least 12 semester hours at NIU with a cumulative GPA of at least 2.50;
- Earned a minimum GPA of 2.25 in all courses counted for credit toward the major and a minimum grade of C in all Mathematics courses;
- Earned a minimum GPA of 2.25 in all courses counted for credit toward the major numbered above MATH 231;
- Completed at least 20 clock hours of approved early clinical experiences;
- Obtained approval from the Secondary Mathematics Educator Licensure Program.

Retention

Students admitted to the licensure program must:

- Maintain a GPA of 2.50 in all course work taken at NIU;
- Maintain a minimum GPA of 2.25 in all courses counted for credit toward the major;
- Maintain a minimum GPA of 2.25 in all courses counted for credit toward the major numbered above MATH 231;
- Complete a satisfactory review of progress each semester with a Coordinator of Educator Licensure in the Department of Mathematical Sciences;
- Take and pass the Test of Academic Proficiency (TAP) of the Illinois Licensure Testing System (ILTS) or meet the ACT/SAT/TAP substitution according to the Illinois State Board of Education rules;
- Take and pass the ILTS Mathematics Content Exam prior to applying for MATH 401/Student Teaching;
- Take and pass the Teacher Performance Assessment (edTPA) before completion of the program

Clinical Requirements

The Illinois State Board of Education (ISBE) requires a minimum of 100 clock hours of substantial, varied and sequential clinical experiences prior to student teaching. This requirement may be satisfied by completing the following sequence of courses:

- ILAS 201 - Introductory Clinical Experience (1)
- ILAS 301 - Second Clinical Experience (1) (usually taken the same semester as EPS 406 or equivalent)
- MATH 4011 - Clinical Secondary School Experience in Mathematics (1-2)

Undergraduates must consult with the Coordinator of Educator Licensure in the Department of Mathematics about admission to ILAS 201, ILAS 301, and MATH 401. Postbaccalaureate students should consult with the Coordinator of Educator Licensure in the Department of Mathematics upon arrival.

Professional Education Course Requirements

The ISBE and requirements for educator licensure in Mathematics at NIU also specify that candidates must earn a grade of C or better for each course included in required professional course work in human development and learning, and teaching of English Language Learners, teaching exceptional children. Candidates should consult with the Coordinator of Educator Licensure in Mathematics to determine which courses satisfy these additional requirements outside the department.

Please note: the above classes for educator licensure may change to reflect new state requirements.

Additional Requirements

For detailed information, see "University Graduation Requirements."

In some cases requirements for licensure in secondary mathematics 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 general education 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.

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).

Exit Examination

Students seeking licensure must pass the edTPA. Students who successfully complete the program and pass the state mandated Teacher Performance Assessment will have completed all required Illinois State Board of Education standards for receiving university recommendation for licensure to teach mathematics at the 9-12 grade levels. Information about this test may be obtained from the ISBE.

Degree with Honors

The Department of Mathematical Sciences offers the exceptional student an opportunity to earn a degree with honors in any of the four 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 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 MATH/STAT courses numbered 300 and above.

Take at least four MATH 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.

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.

* Available for general education credit.

^ This is a Writing Infused Course.

Accelerated B.S./M.S. Program in Mathematical Sciences

Admission

This accelerated sequence leads to both the B.S. and M.S. degrees in Mathematical Sciences. Students who wish to complete this program may apply to the department during their junior year. The program is open to undergraduate majors in mathematical sciences who have completed at least 90 semester hours of undergraduate course work including all general education requirements, all major requirements below the 400 level, and MATH 430. Students who have met these criteria may apply for admission to the M.S. program in Mathematical Sciences under the special provisions of the accelerated degree program. Students must complete their applications to the M.S. program according to the procedures of the Graduate School. Admission to the accelerated degree program is contingent upon departmental approval.

Curriculum

Students accepted into the accelerated degree program will matriculate in the graduate program during their senior year. Up to 18 semester hours of graduate courses may count towards the undergraduate degree. All graduate course work must be approved by the department.

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 300 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 300 (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. Secondary Mathematics Education (31-32)

The minor in Secondary Mathematics Education meets the mathematics requirements for an endorsement to teach mathematics in grades 9-12 in Illinois. Individuals seeking an initial teaching licensure through Northern Illinois University in another discipline area for grades 9-12 need to complete these courses in order to receive an endorsement, on their initial Illinois professional educator license, to teach mathematics in grades 9-12. 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 360 - Model Building in Applied Mathematics (3),
 OR MATH 336 Ordinary Differential Equations (3)
 MATH 412 - Methods of Instruction in the Mathematics Curriculum for Secondary School II (3)
 STAT 300 - Introduction to Probability and Statistics (3)

Select one course from the following (3-4)

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 416 - Topics in Mathematics for Teachers (3)
 MATH 420 - Abstract Algebra I (3)

Six or more semester hours in the minor must be taken at NIU.

In addition to completing the above course work, the candidate must pass the Mathematics Content Area Test (115) of the Illinois Licensure Testing Systems (ILTS) to obtain an endorsement in grades 9-12 Mathematics.

Minor in Elementary Mathematics Education (24)

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. 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 (4)
 *MATH 229 - Calculus I (4)
 MATH 302 - Introduction to Geometry (3)
 MATH 402 - Methods of Instruction in the Mathematics Curriculum for Elementary School I (3)
 MATH 403 - Methods of Instruction in the Mathematics Curriculum for the Elementary School II (3)
 STAT 200 - 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.

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.

* Available for general education credit.

^ This is a Writing Infused Course.

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 (4). 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 lowerdivision 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. 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 I (3). *Crosslisted as TLEE 402X*. Methods, techniques, materials, curricular issues, learning theories, and research utilized in the teaching of elementary school mathematics. Intended for students in the elementary educator licensure program. Accepted for credit as an elementary mathematics methods course, but not as an upper-division mathematics 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.

403. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR ELEMENTARY SCHOOL II (3). Methods, materials, curricular issues, learning theories, and research utilized in the teaching of upper elementary school mathematics, particularly relating to instruction in grades 5 and 6. Intended for students in the elementary educator licensure program. Accepted for credit as a mathematics methods course, but not as an upper-division mathematics 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 402.

404. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR MIDDLE SCHOOL I (3). Methods, materials, curricular issues, learning theories, and research utilized in the teaching of middle school mathematics, particularly relating to instruction in grades 5 and 6. Intended for students in the middle level teacher licensure program. Accepted for credit as a middle school mathematics methods course, but not as an upper-division mathematics 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: Consent of department.

410. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR THE MIDDLE SCHOOL II (3). Objectives, problems, strategies, and trends in teaching middle school mathematics. Applications of learning theory and research focusing on remediation, presentation of new concepts, 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 middle grades. Not used in major or minor GPA calculations for mathematical sciences majors or minors. For those seeking or holding middle grades education licensure. PRQ: MATH 229 and consent of department.

411. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR SECONDARY SCHOOL I (3). Methods and trends of instruction in the pre-secondary school mathematics with particular focus on mathematical practices and processes. Covers the teaching and learning of rational numbers, algebraic reasoning, patterns, functions, measurement, geometric concepts, and statistics and probability. 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. PRQ: MATH 229 and consent of department.

412. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR SECONDARY SCHOOL II (3). Objectives and organization of the curriculum and instructional materials for mathematics programs for secondary school with attention to methods of instruction, use of various representations and technology, and engaging students in mathematical practices. 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 401 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. Not used in major or minor GPA calculation except for mathematics education majors and minors. PRQ: MATH 229 or consent of department.

419. SECONDARY SCHOOL MATHEMATICS CLINICAL EXPERIENCE (0). Fifteen clock hours of pre-student teaching clinical experience. PRQ: 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 CSCI 490.*

A. Algorithms

C. Automata, Computability, and Formal Languages

Selected topics from major areas in computer science. May be repeated when subject varies. PRQ: Senior standing and consent of department.

492. SCHOOL MATHEMATICS (1-6).

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.

494. DIRECTED RESEARCH/INTERNSHIP IN MATHEMATICAL SCIENCES (1-3). May be either academic, consisting of a project guided by a faculty member; or industrial, consisting of an approved project in industry. May be repeated to a maximum of 3 semester hours. S/U grading. PRQ: mathematical sciences majors, junior/senior standing, and 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.

Mathematical Sciences Faculty

Jeffrey L. Thunder, Ph.D., University of Colorado, professor, chair
Douglas Bowman, Ph.D., University of California, Los Angeles, professor

Jose Yunier Bello Cruz Ph.D., Institute of Pure and Applied Mathematics - Brazil, associate professor

Biswa N. Datta, Ph.D., University of Ottawa, Distinguished Research Professor

Sien Deng, Ph.D., University of Washington, professor

Alastair Fletcher, Ph.D., University of Warwick, associate professor

Michael Geline, Ph.D., University of Chicago, associate professor

Daniel Grubb, Ph.D., Kansas State University, associate professor

Qingkai Kong, Ph.D., University of Alberta, professor

Ilya Krishtal, Ph.D., Voronezh State University, professor

Nathan Krislock Ph.D., University of Waterloo, associate professor

Ying C. Kwong, Ph.D., University of Wisconsin, Madison, associate professor

Anders Linnér, Ph.D., Case Western Reserve University, associate professor

Maya Mincheva, Ph.D., University of Waterloo, associate professor

Deepak Naidu, Ph.D., University of New Hampshire, associate professor

Mary Shafer, Ph.D., University of Wisconsin, associate professor

Gleb Sirotkin, Ph.D., Indiana University/Purdue University, Indianapolis, associate professor

Joseph B. Stephen, Ph.D., University of Nebraska, Lincoln, associate professor

John Wolfskill, Ph.D., California Institute of Technology, associate professor

The Center for Nonprofit and NGO Studies (NNGO)

The Center for Nonprofit and NGO Studies 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 Nonprofit and NGO Studies offers both a B.A. and a B.S. degree for a major in nonprofit and NGO studies (NNGO) 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 15 semester hours in interdisciplinary electives related to the worlds in which nonprofits and NGOs operate, chosen with an adviser. Several university departments participate in the major in nonprofit and NGO studies.

Major in Nonprofit and NGO 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 Center (18)

- *NNGO 100 - Community Leadership and Civic Engagement (3)
- NNGO 302 - Introduction to Research in Non-Governmental Organizations and Communities (3)
- NNGO 350 - Community Organizations in a Digital World (3),
OR NNGO 390 - Special Topics in Nonprofit and NGO Studies (3)
- ^NNGO 429/^ANTH 429X/^SOCI 329X - International NGOs and Globalization (3)
- NNGO 493 - Nonprofits and Community Engagement (3)
- ^NNGO 495 - Capstone Seminar in Nonprofit and NGO Studies (3)

Requirements outside center (33)

- 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 103 - Contemporary Issues in Ethics (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)
- SOCI 379 - Collective Behavior and Social Movements (3)
- Five of the following, chosen with adviser approval
 - ACCY 288 - Introduction to Fundamentals of Accounting (3)
 - *ANTH 301 - American Culture (3)
 - ANTH 343/ENVS 343X - Where the Wild Things Were (3)
 - ANTH 361 - Cross-Cultural Perspectives on Women (3)
 - ANTH 363 - Globalization and Corporate Cultures (3)
 - ANTH 425 - Environment and Anthropology (3)
 - *ANTH 426 - Political Anthropology (3)
 - ANTH 427 - Economic Anthropology (3)
 - ANTH 462 - Museum Methods (3)
 - ANTH 464/NNGO 464X - Disasters without Borders (3)
 - ^ANTH 467 - Applied Anthropology (3)

- ART 457 - Museum Education (3)
- *ART 465 - Introduction to Museum Studies (3)
- BKST 300 - Foundations of Black Studies (3)
- 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 362 - Intercultural Communications (3)
- COMS 380 - Corporate Advocacy and Issue Management (3)
- ^COMS 401 - Criticism of Public Rhetoric (3)
- COMS 403 - Freedom of Speech and Communication Ethics (3)
- COMS 470 - Campaign Strategies and Development (3)
- ECON 260 - Principles of Microeconomics (3)
- ECON 261 - Principles of Macroeconomics (3)
- ECON 330 - International Economics (3)
- ECON 386 - Environmental Economics (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)
- ENVS 450 - Issues in Environmental Studies (3)
- EPFE 302 - Advocacy, Justice, and Leadership in a Diverse Society (3)
- *EPFE 355 - Sociology of Schooling (3)
- ^EPFE 400 - Foundations of Education (3)
- ^EPFE 410 - Philosophy of Education (3)
- EPFE 415 - Policy Analysis in Educational Contexts (3)
- *GEOG 202 - World Regional Geography (3)
- GEOG 253 - Environment and Society (3)
- GEOG 406 - Natural Hazards and Environmental Risk (3)
- GEOG 451 - Political Geography (3)
- GEOG 453 - Environmental Management (3)
- *HIST 354 - Black American Business and Entrepreneurship (3)
- *HIST 377 - American Environmental History (3)
- *HIST 387 - History of Genocide (3)
- HIST 390 - Film and History (3)
- HIST 486 - Inequality in Latin America (3)
- INTL 301/401 - Study Abroad Programs (1-9)
- *JOUR 350 - Environment, Health, and Media (3)
- JOUR 401 - Editorial and Opinion Writing (3)
- JOUR 482 - International News Communications (3)
- JOUR 490 - Ethnic Minorities and the News Media (3)
- ^NUTR 406 - Global Food and Nutrition Issues (3)
- PHIL 335 - Environmental Ethics (3)
- PHIL 338 - Philosophy of Food (3)
- POLS 220 - Introduction to Public Policy (3)
- POLS 362 - Politics of Developing Areas (3)
- POLS 383 - International Political Economy (3)
- PSPA 320 - Public Service Leadership (3)
- PSPA 328 - Role of Nongovernmental Organizations in Development (3)
- PSPA 330X/POLS 350 - Bureaucracy and the Public Policy Process (3)
- PSPA 331X/POLS 331 - Introduction to Public Administration (3)
- PSPA 402 - Resource Strategies for Nonprofit Organizations (3)
OR MGMT 402X - Resource Strategies for Nonprofit Organizations (3)
- SOCI 375 - Sociology of Organizations (3)
- SOCI 386 - Peace and Social Justice (3)
- ^SOCI 457 - Families in a Global Perspective (3)
- ^THEA 370 - History of Theatre and Drama I (3)
- ^THEA 371 - History of Theatre and Drama II (3)
- *WGSS 202 - Women and Cultural Expression (3)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

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 Nonprofit and NGO Studies: 51-63 (B.A.) OR 61-66 (B.S.)

Minor in Nonprofit and NGO Studies (18)**Requirements in center (6)**

NNGO 100 - Community Leadership and Civic Engagement (3)
 NNGO 350 - Community Organizations in a Digital World (3),
 OR NNGO 390 - Special Topics in Nonprofit and NGO Studies (3),
 OR ^NNGO 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/NNGO 464X - Disasters without Borders (3)
 NNGO 350 - Community Organizations in a Digital World (3)
 NNGO 390 - Special Topics in Nonprofit and NGO Studies (3)
 ^NNGO 429 - International NGOs and Globalization (3)
 NNGO 490 - Nonprofit and NGO Studies Internship (1-3)
 PSPA 301 - Philanthropy and Fundraising (3)
 PSPA 320 - Public Service Leadership (3)
 PSPA 326X/POLS 326 - Nonprofit Management (3)
 PSPA 328 - Nongovernmental Organizations and Development (3)
 PSPA 402/MGMT 402X - Resource Strategies for Nonprofit Organizations (3)
 ^SOC 329X - International NGOs and Globalization (3)
 SOCI 375 - Sociology of Organizations (3)
 SOCI 379 - Collective Behavior and Social Movements (3)

**Certificate of Undergraduate Study
Nonprofit and NGO Studies (12)**

Coordinator: Christopher Einolf (Director)

The Certificate of Undergraduate Study in Nonprofit and NGO Studies 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)

NNGO 100 - Community Leadership and Civic Engagement (3)
 POLS 326 - Nonprofit Management (3)
 OR PSPA 326X - Nonprofit Management (3)
 Two courses from the following (6)
 ANTH 329 - Anthropology and Contemporary World Problems (3)
 NNGO 350 - Community Organizations in a Digital World (3)
 NNGO 390 - Special Topics in Nonprofit and NGO Studies (3)
 NNGO 429 - International NGOs and Globalization (3)
 NNGO 464X - Disasters Without Borders (3),
 OR ANTH 464 - Disasters Without Borders (3)
 PSPA 301 - Philanthropy and Fundraising (3)
 PSPA 328 - Role of Nongovernmental Organizations in Development (3)
 SOCI 379 - Collective Behavior and Social Movements (3)

Course List (NNGO)

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.

302. INTRODUCTION TO RESEARCH IN NON-GOVERNMENTAL ORGANIZATIONS AND COMMUNITIES (3). Work with communities or in public service organizations to create, conduct, or oversee research projects appropriate to the stage of existence of the organization. Define the issue, design a research plan and practice using both qualitative and quantitative methods. May only be repeated once. PRQ: NNGO majors only; or consent of center.

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 NONPROFIT AND NGO STUDIES (3). Intensive study of a major theory, issue, or movement in nonprofit and NGO studies. May be repeated to a maximum of 9 semester hours with adviser approval. Available for concurrent enrollment. PRQ: Consent of center.

429. INTERNATIONAL NGOS AND GLOBALIZATION (3). *Crosslisted as 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. NONPROFIT AND NGO STUDIES INTERNSHIP (1-3). Supervised internship in nonprofit and NGO studies 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: NNGO 302 with a grade of C or better, NNGO 100, and consent of center.

493. 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: NNGO majors only; at least junior standing; NNGO 100 or PSPA 301; must earn a grade of C or better in NNGO 302; or consent of center.

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

495. CAPSTONE SEMINAR IN NONPROFIT AND NGO STUDIES (3). Intensive case study, research paper or other scholarly work in nonprofit and NGO studies. Includes regular meetings and a formal presentation of results at completion. Serves as final capstone project in the NNGO major. PRQ: NNGO majors only, NNGO 100, NNGO 493, and must earn a grade of C or better in NNGO 302.

498. INDEPENDENT STUDY IN NONPROFIT AND NGO STUDIES (1-3). Special readings and/or research projects in nonprofit and NGO studies. May be repeated to a maximum of 6 semester hours. Available for concurrent enrollment. PRQ: Consent of center.

Nonprofit and NGO Studies Faculty

Christopher Einolf, Ph.D., University of Virginia, associate professor, director

Laura Heideman, Ph.D., University of Wisconsin (Madison), assistant professor

Alicia Schattman, Ph.D., Rutgers University, associate professor

Mark Schuller, Ph.D., University of California, associate 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.)

Accelerated B.A. or B.S./J.D Program in Philosophy and the College of Law

Admission

The six-year accelerated program leads to either the B.A. or B.S. in philosophy together with the J.D. degree. Students who wish to complete this program must identify themselves to the Department of Philosophy as majors who wish to complete the accelerated program. All undergraduates who major in philosophy and have completed at least 90 credit hours of

undergraduate course work (including all general education and major requirements as well as the requirements for a B.A. or B.S. degree, with the exception of the senior capstone requirement in philosophy) with a minimum GPA of 3.25 are eligible to apply for admission to NIU's College of Law under the special provisions of this program. If the senior capstone requirement in Philosophy has not been completed at the time of enrollment in the College of Law, it must be completed no later than the end of the fourth year. As part of the application to the College of Law, applicants must take the LSAT and receive a score at or above the previous year's matriculating law class median. Applicants are advised to take the LSAT and submit their application to the College of Law no later than February of their junior year. Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the College of Law in general, as well as other factors normally considered in admissions decisions by the College of Law.

Curriculum

Students accepted into the College of Law pursuant to this program will start taking law classes at the beginning of their fourth year. Apart from the completion of the senior capstone in philosophy as part of the course load during the fourth year, if needed, the remainder of the program will follow the standard College of Law curriculum. Up to the first 30 credit hours of law courses will be counted toward the bachelor's degree.

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?

103. CONTEMPORARY ISSUES IN ETHICS (3). Consideration of problems of value and conduct, related to questions such as: Is capital punishment justified? Is abortion permissible? Is there a duty to help the poor? Do animals have rights? Should physician-assisted dying be allowed?

* Available for general education credit.

105. LOGIC AND CRITICAL REASONING (3). Introduction to basic principles of reasoning, designed to help students evaluate arguments in everyday life. Topics include deductive reasoning, informal fallacies, inductive reasoning, causal inference, and the nature of evidence and proof.

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.

251. PHILOSOPHY OF RACE (3). Investigation of fundamental questions about race and racism, such as: What is race? How do racial stereotypes affect reasoning? What is racism? How is racism related to sexism? What is the ethical response to racism?

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?

338. PHILOSOPHY OF FOOD (3). A service-learning course that explores the philosophical, ethical, and environmental issues surrounding food and food production, while also teaching students how to grow food, share food, and produce food sustainably.

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, 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, associate professor

Geoff Pynn, Ph.D., Yale University, associate professor

Department of Physics (PHYS)

The Department of Physics offers the B.S. degree in physics with three emphases. Physics majors should complete at least one year of a foreign language and consult with the department chair before choosing one of the three emphases below.

The department also offers a minor in physics, which is attractive to other science and mathematics majors as well as to students in technical programs. Several of the lower-division courses offered by the department can be used by non-majors toward fulfilling the science area requirement in the university's general education program. Certain courses are also required in majors in other departments. In addition, the department also offers astronomy courses. Illinois state 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 (44)

*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)
 OR PHYS 430 - Optics (4)
 PHYS 383 - Intermediate Quantum Physics (3)
 PHYS 460 - Quantum Physics (3)
 PHYS 498 - Senior Seminar (1)

Three of the following¹ (9)

PHYS 400¹ - Analytical Mechanics II (3)
 PHYS 410 - Computational Physics (3)
 PHYS 434 - Nuclear and Particle Physics (3)
 PHYS 461 - Modern Physics (3)
 PHYS 463 - Thermodynamics, Kinetic Theory, and Statistical Mechanics (3)
 PHYS 470¹ - Electricity and Magnetism II (3)
 PHYS 474 - Methods of Experimental Physics (3)
 PHYS 477 - Astrophysics (3)
 PHYS 480 - Condensed Matter Physics and Materials Science (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)
 *MATH 229 and MATH 230 and MATH 232 - Calculus I, II, and III (12)
 MATH 336 - Ordinary Differential Equations (3)
 One of the following (4):
 *CHEM 211 - General Chemistry II (3)
 AND *CHEM 213 - General Chemistry Laboratory II (1)
 CSCI 240 - Computer Programming in C++ (4)

Total Hours for Emphasis 1, Professional Physics for Graduate Study: 76

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)

*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 and Middle Level Education (3)
 PHYS 495 - Teaching of Physical Sciences (3)
 PHYS 498 - Senior Seminar (1),

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

* Available for general education credit.

^ This is a Writing Infused Course.

¹ PHYS 400 and PHYS 470 are recommended for students intending to enter graduate school in physics.

Emphasis 3. Applied Physics

Requirements in Department (32)

*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)
 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),

Requirements outside Department (23)

*CHEM 210 General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
 *MATH 229 and MATH 230 and MATH 232 - Calculus I, II, and III (12)
 MATH 336 - Ordinary Differential Equations (3)
 One of the following (4):
 *CHEM 211 - General Chemistry II (3)
 AND *CHEM 213 - General Chemistry Laboratory II (1)
 CSCI 240 - Computer Programming in C++ (4)

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: 71

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 "Educator Licensure 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 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, licensure 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 (1)
 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 and Middle Level Education (3)
 PHYS 495 - Teaching of Physical Sciences (3)
 (must be taken concurrently with PHYS 401)
 PHYS 496 - Transition to the Professional Physics Teacher (2)
 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.

* Available for general education credit.

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 499.

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

101. INTRODUCTION TO THE PHYSICS MAJOR (2). Introduction to Northern Illinois University and the baccalaureate experience in physics. Exploration of factors influencing the transition into the university and the undergraduate physics programs. Introduction to department and university resources. Development of skills to enhance academic success with a focus on student responsibility for learning. Introduction to physics concepts including particles, forces, units, errors, and modern physics, and required skills in mathematics and computing. Substitutes for UNIV 101. Available only to first-year students. May not be repeated.

150. PHYSICS (3). Development of concepts and principles from selected topics in mechanics, electricity, heat, sound, and light. Application to everyday life and contemporary issues facing society, and their implications. Topics may include energy sources, climate change, medical physics, among others. Not recommended for students who have had a year of high school physics. Not available for credit to students with credit in PHYS 150A.

151. PHYSICS LABORATORY (1). Selected experiments designed to accompany PHYS 150. One two-hour laboratory per week. CRQ: PHYS 150.

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 273. PRQ: PHYS 210 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 273. PRQ: PHYS 211. 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. 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. PRQ: 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. PRQ: MATH 230 and 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 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 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.

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 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: 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 273.

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 and consent of department.

^ This is a Writing Infused Course.

367. WAVES AND VIBRATIONS (3). Free and forced vibrations, coupled oscillators, properties of waves, reflection, diffraction, and interference. PRQ: MATH 232 and 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 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, semiconductors, transistors, operational amplifiers, and simple digital logic. Programming and circuit testing using software as LabView. Includes lecture and three hours of 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 (2). 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 physics and related disciplines. Use of equation solving software and high-level programming languages. Students in physics, engineering, chemistry, biology, computer science, geology, meteorology, and related sciences will be exposed to problems in their fields. PRQ: PHYS 273 and CSCI 240, or consent of department.

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 AND PARTICLE PHYSICS (3). Applications of quantum physics to nuclei and elementary particles. PRQ: 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.

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.

474. METHODS OF EXPERIMENTAL PHYSICS (3). Basic techniques of experimental physics. Design and construction of research apparatus and safety procedures. Use of computers and electronics for experimental measurement and control. Simulations and statistical methods of data analysis. 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. CONDENSED MATTER PHYSICS AND MATERIALS SCIENCE (3). Applications of quantum physics to solids and materials including the mechanical, thermal, electrical, optical, and structural properties of 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, ENVS 475X, 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: GEOL 120 and GEOL 121, 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 AND MIDDLE LEVEL EDUCATION (3). *Crosslisted as BIOS 402X, CHEM 493X, ENVS 483X, and GEOL 483.* 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.

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 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: CHEM 401 or GEOL 401 or PHYS 401.

496. TRANSITION TO THE PROFESSIONAL PHYSICS 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. Candidate will reflect on the preparatory experience and complete documentation demonstrating ability to perform as a qualified physics teacher. Directly addresses all INTASC, NSTA, and ISBE standards. CRQ: PHYS 497 or consent of department.

497. STUDENT TEACHING (SECONDARY) IN PHYSICS/PHYSICAL SCIENCES (10). Student teaching in grades 9-12 for 12 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.

499. SENIOR PROJECT IN PHYSICS (1-3). 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. May be repeated to a maximum of 6 semester hours. PRQ: PHYS 374 and senior standing in physics.

Physics Faculty

Laurence Lurio, Ph.D., Harvard University, professor, chair
 Jahred Adelman, Ph.D., University of Chicago, assistant professor
 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, Distinguished Research Professor
 Swapan Chattopadhyay, Ph.D., University of California at Berkeley, Presidential Research, Scholarship, and Artistry Professor
 Omar Chmaissem, Ph.D., Université Joseph Fourier (Grenoble), Presidential Research, Scholarship, and Artistry Professor
 George Coutrakon, Ph.D., State University of New York, Stony Brook, 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, 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), professor
 Zhili Xiao, Ph.D., University of Konstanz (Germany), Distinguished Research Professor, Board of Trustees Professor
 Vishnu Zutshi, Ph.D., University of Delhi (India), associate professor

Department of Political Science (POLS)

The Department of Political Science offers the B.A. and B.S. degree with a major in political science with emphases in politics and governance, public law, public administration and service, and international politics.

The emphasis in politics and governance 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, Southeast Asian studies, and women's and gender 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 and Governance

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 200 or STAT 300.

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 200 (4) or STAT 300 (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 and Governance: 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 200 or STAT 300.

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 200 (4) or STAT 300 (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.)**

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 policy courses(3)

- POLS 324 - Politics of Environmental Health, and Safety Regulation (3)
- POLS 380 - American Foreign Policy (3)
- POLS 383 - International Political Economy (3)
- POLS 389 - International Law and Organization (3)

Two of the following public administration courses(6).

Recommended that POLS 331 OR PSPA 331X be taken before enrolling in the following courses.

- 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)
- PSPA 320 - Public Service Leadership (3)
- PSPA 410 - Supervision in the Public Sector (3)
- PSPA 411 - The Ethical Public Administrator (3)
- PSPA 412 - Public Budgeting (3)
- PSPA 413 - Community Engagement in Public Service Agencies (3)

One of the following institutional courses (3)

- POLS 302/PSPA 302X - Government in Metropolitan Areas (3)
- POLS 303/PSPA 303X - State and Local Government (3)
- POLS 307 - The U.S. Congress (3)
- POLS 308 - The American Presidency (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 220/PSPA 220X - Introduction to Public Policy (3), and POLS 340 - Political Analysis (3). The B.S. is highly recommended for students planning careers in public policy and public administration. 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 200 or STAT 300.

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 200 (4) or STAT 300 (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 and Consumer Sciences), international studies, journalism, or sociology.

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)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

¹ May be counted toward the emphasis when topic is appropriate.

- 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)

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 200 or STAT 300.

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 200 (4) or STAT 300 (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 200 or STAT 300.

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 200 (4) or STAT 300 (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.)

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 Educator Licensure 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 Educator Licensure Program when they have:

established a file with the History and Social Sciences Educator Licensure 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 2.67;

passed the Test of Academic Proficiency or equivalent recognized by the ISBE;

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 NIU;

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 Educator Licensure Program

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

Retention

Students admitted to the program must maintain program GPA requirements, display appropriate professional dispositions, and complete a satisfactory review of progress each semester with the History and Social Sciences Educator Licensure Program. Students must also pass any additional tests required by the ISBE for educator licensure such as the appropriate state Content Area Test (taken before student teaching) and the Teacher Performance Assessment (taken before program completion).

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 and concurrently with the Third Clinical Secondary School Experience in History/Social Sciences.

Other Requirements

Students pursuing educator licensure must take additional, approved course work in history and the social sciences to acquire the broad-based, interdisciplinary knowledge required of secondary social studies educators. Students must also complete approved professional education course work in areas such as special education methods, content-area literacy, and teaching English-language learners. Contact the History and Social Sciences Educator Licensure Program for the current list of history, social science, and education courses approved for fulfilling these requirements.

Students must also complete a three-semester sequence of pre-student teaching clinical experiences, including HIST 401, Third Clinical Secondary School Experience in History/Social Sciences, as well as 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.

Students pursuing 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.

The History and Social Sciences Educator Licensure 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 Educator Licensure Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Educator Licensure 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.

Accelerated B.A. or B.S./J.D. Program in Political Science and the College of Law

Admission

The six-year integrated sequence leads to either the B.A. or B.S. in Political Science and J.D. degrees. Students who wish to complete this program must identify themselves to the Political Science Department as majors with a Politics and Governance Emphasis

who wish complete the Accelerated Program. 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 are eligible to apply to NIU's College of Law under the special provisions of this program. As part of the application to the College of Law, applicants must take the LSAT and receive a score at or above the previous year's matriculating law class median. Applicants are advised to take the LSAT and submit their application to the College of Law no later than February of their junior year. Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the College of Law in general, as well as other factors normally considered in admissions decisions by the College of Law.

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.

Accelerated B.S. or B.A./M.A. Program in Political Science

Admission

This program leads to both the B.S. or B.A. and M.A. in Political Science degrees. Students who want to complete this program must identify themselves to the Political Science Department as majors who will complete the accelerated program with a Politics and Governance emphasis. The program is open to all undergraduates who major in Political Science and have completed at least 96 credit hours of undergraduate course work. Students who have met these standards in their B.A. or B.S. degree program in Political Science must also apply for admission to the Political Science M.A. program under the special provisions of this program. Students must meet the application deadlines given by the Graduate School. To qualify for this program, applicants must take the GRE and meet one of the following:

- Score better than the 50th percentile in both quantitative and verbal
- Average better than 65th percentile for combined quantitative and verbal
- A select number of seats are reserved for University Honors students who meet the above admission criteria; and as such, are guaranteed entry into the program.

Curriculum

Students must complete all the requirements for the Political Science B.A. or B.S. degree programs as well as all general education requirements by the end of their junior year. Beginning with the first semester of their senior year, students will start taking classes in the Political Science M.A. program. These courses will count toward the final 24 credits of the undergraduate degree. Upon receiving their undergraduate degree, students will then follow the standard timetable for receiving a M.A. in Political Science. Students in the Political Science Accelerated M.A. program are not bound by the College of Liberal Arts and Sciences policy that prohibits students from earning more than 60 credit hours in their major.

Accelerated B.A. or B.S./M.P.A. in Political Science and Public Administration

Admission

This program leads to both the B.S. or B.A. in Political Science and the Master of Public Administration (M.P.A.) degrees. Students who want to complete this program must identify themselves to the Political Science Department as majors who will complete the accelerated program with a Politics and Governance emphasis. The program is open to all undergraduates who major in Political Science; have completed at least 96 credit hours of undergraduate coursework; and meet the Department of Political Science's Degree with Honors requirements (see below). Students who have met these standards in their B.A. or B.S. degree in Political Science must also apply for admission to the NIU's M.P.A. program no later than February 1st of the applicant's junior year. Students must meet the application deadlines given by the Graduate School. To qualify for this program, applicants must meet each of the following at the time of application to the MPA program:

- Have completed POLS 100 or POLS 150 with a grade of B or higher
- Have completed POLS 340 with a grade of B or higher
- Have completed POLS 331/PSPA 331x with a grade of B or higher.
- Participate in an oral interview with a faculty or staff member of the Department of Public Administration.

Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the MPA program in general, as well as other factors normally considered in admissions decisions by the admissions committee of the Department of Public Administration.

Curriculum

Students must complete all the requirements for the Political Science B.A. or B.S. degrees as well as all general education requirements by the end of their junior year. Beginning with the first semester of their senior year, students will start taking classes in the M.P.A. program as well as complete undergraduate departmental honors. These courses will count toward the final 24 credits of the undergraduate degree. Upon receiving their undergraduate degree, students will then follow the standard timetable for receiving the M.P.A. in Public Administration. Students in the Accelerated Political Science/M.P.A. program are not bound by the College of Liberal Arts and Sciences policy that prohibits students from earning more than 60 credit hours in their major.

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.

341. 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

390. POLITICS AND POPULAR MUSIC (3). Analysis of popular music to explore topics such as protest songs, political campaign songs, benefit concerts, and the connection between musicians and social movements with particular emphasis on issues of race, gender, and class.

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 (3). Admission upon written approval by the internship coordinator for the Department of Political Science. Credit awarded to qualified students upon completion of an internship 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 AND MIDDLE GRADES 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 middle grades and secondary levels. PRQ: Admission to the history or social science secondary or middle grades educator licensure program and permission of the Department of History's office of secondary educator licensure.

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.

499. 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

Scot Schraufnagel, Ph.D., Florida State University, associate professor, chair

April Clark, Ph.D., University of California, Santa Barbara, associate professor

Michael Clark, Ph.D., University of California, Santa Barbara, associate professor

Aarie Glas, Ph.D., University of Toronto, assistant professor

Kikue Hamayotsu, Ph.D., Australian National University, associate professor

Colin Kuehl, Ph.D., University of California, Santa Barbara, assistant professor

J. Mitchell Pickerill, Ph.D., University of Wisconsin, associate professor

Andrea Radasanu, Ph.D., University of Toronto, associate professor

Matthew J. Streb, Ph.D., Indiana University, professor

H. Brendon Swedlow, Ph.D., University of California, Berkeley, associate professor

Ches Thurber, Ph.D., Tufts University, assistant professor

Kheang Un, Ph.D., Northern Illinois University, associate professor

Artemus E. Ward, Ph.D., Syracuse University, professor

Department of Psychology (PSYC)

The Department of Psychology offers the B.A. and B.S. degree with a major in psychology. Either program can be used to gain 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 100 - Basic Statistics (3),

OR STAT 200 - Elementary Statistics (4)

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 (12-16)

[Students selecting a sequence that does not include STAT 200 (4) or STAT 300 (3) will also be required to take one of these courses or STAT 100 (3) as a pre-requisite for PSYC 305 (with a grade of C or better).]

See "College Requirement for the B.S. Degree" in the Other Graduation Requirements section of this catalog.

**Total Hours for a Major in Psychology: 38-51 (B.A.)
OR 49-51 (B.S.)**

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 Educator Licensure 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 Educator Licensure Program when they have

established a file with the History and Social Sciences Educator Licensure 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 2.67;

passed the Test of Academic Proficiency or equivalent recognized by the ISBE;

completed at least 6 semester hours of psychology at NIU and earned a minimum GPA of 3.00 in all psychology courses taken at NIU;

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 Educator Licensure Program

Retention

Students admitted to the program must maintain program GPA requirements, display appropriate professional dispositions, and complete a satisfactory review of progress each semester with the History and Social Sciences Educator Licensure Program. Students must also pass any additional tests required by the ISBE for educator licensure such as the appropriate state Content Area Test (taken before student teaching) and the Teacher Performance Assessment (taken before program completion).

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 and concurrently with the Third Clinical Secondary School Experience in History/Social Sciences.

Other Requirements

Students pursuing educator licensure must take additional, approved course work in history and the social sciences to acquire the broad-based, interdisciplinary knowledge required of secondary social studies educators. Students must also complete approved professional education course work in areas such as special education methods, content-area literacy, and teaching English-language learners. Contact the History and

* Available for general education credit.

^ This is a Writing Infused Course.

Social Sciences Educator Licensure Program for the current list of history, social science, and education courses approved for fulfilling these requirements.

Students must also complete a three-semester sequence of pre-student teaching clinical experiences, including HIST 401, Third Clinical Secondary School Experience in History/Social Sciences, as well as 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.

Students pursuing 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.

The History and Social Sciences Educator Licensure 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 Educator Licensure Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Educator Licensure 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. POSITIVE PSYCHOLOGY (3). Analysis of behavioral and environmental factors promoting optimal mental health. Development of knowledge for cultivating well-being. Consideration of scientific evidence for methods designed to support behavioral, cognitive, and emotional growth. PRQ: PSYC 102.

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 100, STAT 200, or STAT 300, 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 100, STAT 200, or STAT 300) and PSYC 305, or consent of department.

315. DEVELOPMENTAL PSYCHOPATHOLOGY (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 200 or STAT 300; 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 one of the following: PSYC 315, PSYC 316, PSYC 332, PSYC 351; 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 one of the following: PSYC 315, PSYC 316, PSYC 360; 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 either PSYC 225 or 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 either PSYC 225 or 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.

427. COGNITIVE DEVELOPMENT (3). Advanced seminar that examines the development of cognition in humans across development. Review and evaluation of theories and empirical research concerning the development of cognitive processes, including autobiographical memory, causal inference, executive function, and metacognition, as well as development of knowledge in core domains. PRQ: PSYC 102 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 351, 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 either PSYC 225 or 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 one of the following: PSYC 332, PSYC 351, 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 either PSYC 345 or 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.

475. **TRAUMA PSYCHOLOGY (3).** Introduction to the field of trauma psychology. Overview of trauma-related constructs, rates of exposure, and common post-traumatic mental health outcomes. Coverage of the difficulties associated with studying and treating trauma. PRQ: PSYC 315 or PSYC 316, or consent of department.

476. **SEMINAR IN THE PSYCHOLOGY OF STEREOTYPING, PREJUDICE, AND DISCRIMINATION (3).** An introduction to psychological data and psychological theory that pertains to the psychology of stereotyping, prejudice, and discrimination. Explores the psychological origins of these phenomena, the mental processes by which they are maintained and manifested, their aftereffects, and the prospects for their change. 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. **PSYCHOLOGY OF STRESS (3).** Examines the concept of stress from the physiological and psychological perspectives. Review and discuss empirical research and theoretical models that have been proposed relating to stress and its effects on behavior. PRQ: PSYC 102 and PSYC 300 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 FOR SECONDARY AND MIDDLE GRADES 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 middle grades and secondary levels. PRQ: Admission to the history or social science secondary or middle grades educator licensure program and permission of the Department of History's office of secondary educator licensure.

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

Leslie Matuszewich, Ph.D., University of Buffalo, associate professor, chair
 Larissa K. Barber, Ph.D., Saint Louis University, assistant professor
 David J. Bridgett, Ph.D., Washington State University, associate professor
 M. Anne Britt, Ph.D., University of Pittsburgh, Distinguished Research 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, associate professor
 Michelle M. Lilly, Ph.D., University of Michigan, associate professor
 Joseph P. Magliano, Ph.D., University of Memphis, Distinguished Research Professor
 Christine K. Malecki, Ph.D., University of Wisconsin, Presidential Engagement Professor
 Keith K. Millis, Ph.D., Memphis State University, professor
 Nina S. Mounts, Ph.D., University of Wisconsin, professor
 Julia A. Ogg, Ph.D., Michigan State University, assistant professor
 Holly K. Orcutt, State University of New York, Buffalo, associate professor
 Christopher P. Parker, Ph.D., Rice University, associate professor
 Bradford H. Pillow, Ph.D., Stanford University, associate professor
 Laura D. Pittman, Ph.D., University of Connecticut, Storrs, 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, associate professor
Elizabeth C. Shelleby, Ph.D., University of Pittsburgh, assistant professor
John J. Skowronski, Ph.D., University of Iowa, Distinguished Research Professor, Board of Trustees 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 nonprofit and NGO studies; and the minor in black studies to support undergraduate students who aspire to a public service career.

Certificate of Undergraduate Study

Public Service 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 320 - 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 (3)

PSPA 411 - The Ethical Public Administrator (3)

PSPA 412 - Public Budgeting (3)

PSPA 413 - Community Engagement in Public Service Agencies (3)

Course List (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.

301. PHILANTHROPY AND FUNDRAISING (3). Examination of the role of philanthropic activities in a civil society both domestically and internationally. Philanthropy includes volunteerism and monetary donations. Survey of fundraising techniques, ethics, and policies.

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.

320. 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.

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 (3). 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 SERVICE AGENCIES (3). Exploration of how community engagement can benefit public service agencies, including a review of the various avenues to engage citizens in departmental activities and proper roles for such engagement.

496. INDEPENDENT STUDY IN PUBLIC ADMINISTRATION (1-6). Special readings and topics in public administration. May be repeated to a maximum of 6 semester hours. PRQ: Requires syllabus approved by a department faculty member and consent of department.

Public Administration Faculty

Kurt M. Thurmaier, Ph.D., Syracuse University, Presidential Engagement Professor, chair

Julie Langer, Ph.D. University of Illinois, Chicago, assistant professor

Li-Yin Liu, Northern Illinois University, Visiting Assistant Professor

Alicia M. Schatteman, Ph.D., Rutgers University, assistant professor

Eric S. Zeemering, Ph.D. Indiana University, associate professor

Department of Sociology (SOCL)

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 and consumer sciences, 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, Southeast Asian studies, and women's and gender 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)

*SOCL 170 - Introduction to Sociology (3)
 SOCL 300 - Foundations of Sociology (3)
 SOCL 301 - Classical Sociological Theory (3)
 SOCL 302 - Contemporary Sociological Theory (3)
 SOCL 377A - Sociological Inquiry I (4)
 SOCL 377B - Sociological Inquiry II (4)

Additional courses in sociology (18), at least 6 semester hours of which must be 400-level courses.

A student must have an overall GPA of at least 2.00 in the major courses and have completed the following courses, with a grade of C or better in each course, to complete the major in Sociology:

SOCL 170 - Introduction to Sociology (3)
 SOCL 300 - Foundations of Sociology (3)

Requirements outside Department (B.A., 3-16; B.S., 11-15)

For the B.A. Degree

*STAT 100 - Basic Statistics (3),
 OR STAT 200 - 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 (11-15)

Group 1

CSCI 210 - Elementary Programming (4)
 *MATH 210 - Finite Mathematics (3)
 *MATH 211 - Calculus for Business and Social Science (4)
 STAT 200 - Elementary Statistics (4)

OR

Group 2

*MATH 229 and MATH 230 - Calculus I and II (8)
 STAT 300 - Introduction to Probability and Statistics (3)

**Total Hours for a Major in Sociology: 40-53 (B.A.)
 OR 49-53 (B.S.)**

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 Educator Licensure 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 Educator Licensure Program when they have

established a file with the History and Social Sciences Educator Licensure 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 2.67;

passed the Test of Academic Proficiency or equivalent recognized by the ISBE;

completed at least 6 semester hours of sociology at NIU and earned a minimum GPA of 3.00 in all sociology courses taken at NIU;

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 Educator Licensure Program.

Retention

Students admitted to the program must maintain program GPA requirements, display appropriate professional dispositions, and complete a satisfactory review of progress each semester with the History and Social Sciences Educator Licensure Program. Students must also pass any additional tests required by the ISBE for educator licensure such as the appropriate state Content Area Test (taken before student teaching) and the Teacher Performance Assessment (taken before program completion).

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 and concurrently with the Third Clinical Secondary School Experience in History/Social Sciences.

Other Requirements

Students pursuing educator licensure must take additional, approved course work in history and the social sciences to acquire the broad-based, interdisciplinary knowledge required of secondary social studies educators. Students must also complete approved professional education course work in areas such as special education methods, content-area literacy, and teaching English-language learners. Contact the History and Social Sciences Educator Licensure Program for the current list of history, social science, and education courses approved for fulfilling these requirements.

Students must also complete a three-semester sequence of pre-student teaching clinical experiences, including HIST 401, Third Clinical Secondary School Experience in History/Social Sciences, as well as 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.

Students pursuing 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.

The History and Social Sciences Educator Licensure 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 Educator Licensure Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Educator Licensure 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.

Accelerated B.A. or B.S./J.D. Program in Sociology and the College of Law

Admission

The accelerated sequence leads to either a B.A. or B.S. in Sociology and the J.D. degree. Students who want to complete this program must identify themselves to the Sociology Department as majors who will complete the program. This program is open to all undergraduates who major in sociology and have completed at least 90 credit hours of undergraduate course work, including all requirements for the sociology B.A. or B.S. degree, as well as all general education requirements, with a minimum GPA of 3.25. Juniors who have met these standards in their B.S. or B.A. degree in sociology are eligible to 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 at or above the 50th percentile of the previous year's matriculating law class.

Curriculum

Students must complete all the requirements of the sociology B.A. or B.S. degree as well as all general education requirements by the end of their junior year. Students accepted into the College of Law pursuant to the special provisions of this program will matriculate in the College of Law in the fall of their senior year. Up to 30 hours of law 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.

Accelerated B.A. or B.S./ M.A. Program in Sociology

Admission

The accelerated sequence leads to either a B.A. or B.S. in sociology and the M.A. in sociology degrees. Students who wish to complete this program must identify themselves to the Department of Sociology as majors who will complete the program as soon as possible. The program is open to all undergraduates who major in sociology and have completed at least 96 semester hours of undergraduate course work, including all general education requirements and the following required courses in the major: SOCI 300, SOCI 301, SOCI 302, SOCI 377A, SOCI 377B. Students must possess a minimum overall GPA of 3.25 and a minimum GPA of 3.50 for the required courses in the major—SOCI 300, SOCI 301, SOCI 302, SOCI 377A, SOCI 377B—or a satisfactory score on the GRE. Students who have met these criteria are eligible to apply for admission to the M.A. program in sociology under the special provisions of the accelerated degree program. Students must complete their application to the M.A. program according to the procedures of the Graduate School.

Curriculum

Students must complete all the requirements of the sociology B.A. or B.S. degree as well as all general education requirements by the end of their junior year and all required courses in the SOCI major: SOCI 300, SOCI 301, SOCI 302, SOCI 377A, SOCI 377B. Students accepted into the accelerated dual B.A. or B.S. and M.A. program in sociology pursuant to the special provisions of this program will matriculate in the graduate program in their senior year. Up to 18 credits of graduate courses will count toward the final 24 credits of the undergraduate degree. Upon receiving their undergraduate degree, students will then follow the standard timetable for receiving an M.A. in sociology.

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.

* Available for general education credit.

Minor in Sociology (18)

*SOCI 170 - Introduction to Sociology (3)

SOCI 300 - Foundations of Sociology (3)

A minimum of 12 semester hours of electives in sociology.

A minimum of 12 semester hours of electives in sociology, with at least six hours of electives at the upper (300-400) level.

Six or more semester hours in the minor must be taken at NIU.

A student must have an overall GPA of at least 2.00 in the minor courses and have completed the following courses with a grade of C or better in each course to complete the minor in Sociology:

SOCI 170 - Introduction to Sociology (3)

SOCI 300 - Foundations of Sociology (3)

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 357 - Sociology of Gender (3),

OR SOCI 361 - Race and Ethnicity (3),

OR SOCI 450 - Social Inequality (3)

SOCI 380 - Deviance in Society (3)

SOCI 382 - Terrorism, Hate Groups and Security (3)

SOCI 384 - Police in a Democratic Society (3)

SOCI 385 - Gangs and Gang Behavior (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

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 NGO 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.

330. ANIMALS AND SOCIETY (3). Application of sociological theories and concepts to the various roles that animals play in society. Examination of the nature of the human-animal bond. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of the department.

335. IMMIGRATION (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.

* Available for general education credit.

^ This is a Writing Infused Course.

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.

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.

362. SOCIOLOGY OF LATINOS (3). Analyzes Latin American-origin populations in the United States and examines how social processes affect these groups. Topics include race/ethnicity, class, gender, age, sexuality, immigration status, media, politics, and other issues shaping the lives of Latinos/as in the United States, using a wide range of multimedia.

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.

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 100 or STAT 200 or STAT 300 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.

382. TERRORISM, HATE GROUPS, AND HOMELAND SECURITY (3). A global sociological perspective to survey international and domestic forms of terrorism, hate crimes/groups, extremism, and counter-terrorism. Video, websites, and readings/writings used to develop an understanding of the who, what, when, where, why, and how of groups as diverse as Al Qaeda, Irish separatists, the KKK, and many others from around the world, as well as what can (and cannot) be done about them. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of the 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.

385. GANGS AND GANG BEHAVIOR (3). Examines the nature and dynamics of gangs and gang behavior in the United States. Focuses on the problem of defining gangs and gang behavior, the extent of gang and gang behavior, and the time trends of gangs and gang behavior, the commonalities and variability in gangs and gang behavior, the link between gangs and criminal behavior, and an understanding of the structure, logic, and limitations of empirical social research on gangs. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of the 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.

452. WOMEN'S HEALTH ISSUES (3). Critical analysis of selected health issues that affect the life experiences of women. Emphasis on feminist theories and the intersections of race, class, and culture to interpret these health-related experiences of women. A culminating experience integrating theory, research, and scholarly writing is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of the 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. 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.

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 AND MIDDLE GRADES 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 grades and secondary levels. PRQ: Admission to the history or social science secondary or middle grades educator licensure program and permission of the Department of History's office of secondary education licensure.

Sociology Faculty

Michael E. Ezell, Ph.D., Duke University, associate professor, chair
 Abu B. Bah, Ph.D., New School for Social Research, professor
 Keri B. Burchfield, Ph.D., Pennsylvania State University, professor
 Cassandra S. Crawford, Ph.D., University of California, San Francisco, associate professor
 Christopher Einolf, Ph.D., University of Virginia, associate professor
 Kerry O. Ferris, Ph.D., University of California at Los Angeles, associate professor
 Laura Heideman, Ph.D., University of Wisconsin, assistant professor
 Jeffrey Kidder, Ph.D., University of California, San Diego, associate professor
 Fred E. Markowitz, Ph.D., State University of New York at Albany, professor
 Kirk Miller, Ph.D., North Carolina State University, associate professor
 Kristopher K. Robison, Ph.D., The Ohio State University, associate professor
 Diane M. Rodgers, Ph.D., University of Missouri-Columbia, associate professor
 Shane Sharp, Ph.D., University of Wisconsin, associate professor
 Carol Walther, Ph.D., Texas A&M University, associate professor
 Simón E. Weffer, Ph.D., Stanford University, associate professor

Department of Statistics and Actuarial Science (STAT, ACSC)

The Department of Statistics and Actuarial Science offers B.S. degrees with a majors in statistics and actuarial science.

The department also offers minors in 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 statistics and actuarial science and participates in the University Honors Program.

Several of the department's courses partially fulfill the university quantitative literacy foundational studies requirement, and others can be used by non-majors toward fulfilling the nature and technology knowledge domain requirement in the university's general education program. In addition, several of its courses are included as requirements for other programs.

Department Regulations

For all majors in the department, the GPA in the major is calculated by using only those statistics and actuarial science courses numbered 300 or above that are available for credit toward the major.

Department Requirements

Students majoring or minoring in statistics or actuarial science must obtain a minimum GPA of 2.00 in those STAT/ACSC and mathematics and professional education courses applicable to their major or minor.

All majors are required to have a satisfactory portfolio of work done during their undergraduate studies on file in the Department of Statistics and Actuarial Science. The contents of the portfolio are 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 statistics 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 Statistics and Actuarial Science.

With department permission, students are allowed to complete one major and one minor in the department. For the minor, the student must earn at least 6 semester hours in STAT/ACSC courses that are not counted in fulfillment of the major in the department. The major and the minor may not be in the same area.

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 Statistics (B.S.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (30-32)

*STAT 300 - Introduction to Probability and Statistics (3)
STAT 400 - Probability (3),
OR ACSC 400X - Probability (3)
STAT 410 - Mathematical Statistics I (3)
STAT 415 - Computational Methods in Statistics (3)
STAT 435 - Applied Regression Analysis (3)
STAT 437 - Categorical Data Analysis (3),
OR ACSC 437 - Categorical Data Analysis (3)

At least 6 additional semester hours of STAT courses numbered 400 or higher. Courses that are crosslisted with a STAT course may be counted towards this requirement (6-8)

At least 6 additional semester hours of STAT/ACSC/MATH courses numbered 400 or higher (6)

Requirements outside Department (20)

CSCI 240 - Computer Programming in C++ (4)
*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 240 - Linear Algebra and Applications (4)

Total Hours for a Major in Statistics: 50-52 (B.S.)

Recommendations for Statistics Students

A minor in a discipline that uses statistics is highly recommended.

Internship opportunities in statistics are available with many employers, including pharmaceutical companies, insurance companies, manufacturing companies, and government agencies.

Major in Actuarial Science (B.S.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

This major 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 Statistics and Risk Modeling 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, and to Exam MLC (Models for Life Contingencies) of the SOA are also available to actuarial students. The major also provides the Validation by Educational Experience (VEE) required by the societies if the students complete those courses with a grade of B or better.

Requirements in Department (40)

ACSC 417X - Applied Statistical Learning (3),
OR STAT 417 - Applied Statistical Learning (3)
ACSC 350 - Theory of Interest (4)
ACSC 400X - Probability (3),
OR STAT 400 - Probability (3)
ACSC 405 - Quantitative Methods for Actuaries (3)
ACSC 450 - Life Contingencies and Payment Models I (3)
STAT 300 - Introduction to Probability and Statistics (3)
STAT 410 - Introduction to Mathematical Statistics I (3)
STAT 415 - Computational Methods in Statistics (3)

At least 12 additional semester hours of ACSC courses numbered 400 or higher or STAT 411. Courses that are crosslisted with an ACSC course may be counted towards this requirement (12).

At least 3 additional semester hours of STAT/ACSC courses numbered 400 or higher (3)

Requirements outside Department (32)

ACCY 288 - Fundamentals of Accounting (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)
 *MATH 229 - Calculus I (4)
 MATH 230 - Calculus II (4)
 MATH 232 - Calculus III (4)
 MATH 240 - Linear Algebra and Applications (4)

Total Hours for a Major in Actuarial Science: 72 (B.S.)

Recommendations for Statistics Students

A minor in computer science is highly recommended.

Degree with Honors

The Department of Statistics and Actuarial Science offers the exceptional student an opportunity to earn a degree with honors in any of the two majors. Any statistics or actuarial student may become a candidate for an honors degree 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 STAT/ACSC courses completed.

A student with these qualifications who wishes to become an honors degree candidate should go to the Department of Statistics and Actuarial Science 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 from the department.

Most 300-level and 400-level statistics and actuarial courses may be taken as honors courses.

Requirements

Maintain a 3.00 or higher overall GPA.

Maintain a 3.50 or higher GPA for STAT/ACSC courses numbered 300 and above.

Take at least four STAT/ACSC honors courses numbered 300 or higher. 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 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.

ACSC 350 - Theory of Interest (4)
 ACSC 400X - Probability (3)
 OR STAT 400 - Probability (3)
 ACSC 405 - Quantitative Methods for Actuaries (3)
 *MATH 229 - Calculus I (4)
 MATH 230 - Calculus II (4)
 MATH 232 - Calculus III (4)
 MATH 240 - Linear Algebra and Applications (4)
 STAT 300 - Introduction to Probability and Statistics (3)

Ten or more semester hours in the minor must be taken at NIU.

Minor in Statistics (21-23)

*MATH 229 - Calculus I (4)
 MATH 230 - Calculus II (4)
 MATH 232 - Calculus III (4)
 *STAT 300 - Introduction to Probability and Statistics (3)
 Two STAT courses numbered 400 or above, courses that are crosslisted with a STAT course may be counted towards this requirement (6-8)

Six or more semester hours in the minor must be taken at NIU.

Course List

Actuarial Sciences (ACSC)

350. THEORY OF INTEREST (4). Rates of interest, present and future values, annuities-certain, perpetuities, loans, bonds, 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. Covers the learning outcomes regarding financial mathematics in the exam FM of the Society of Actuaries (SOA), which is also the Exam 2 of the Casualty Actuarial Society (CAS). PRQ: MATH 230.

400X. PROBABILITY (3). *Crosslisted as STAT 400*. Probability spaces, random variables, discrete, continuous, mixed probability distributions, moment generating functions, multivariate distributions, conditional probability, conditional expectation, and special distributions. PRQ: MATH 232 and STAT 300; or consent of department. CRQ: MATH 240 or consent of department.

405. QUANTITATIVE METHODS FOR ACTUARIES (3). Multivariate distributions, transformations of random variables, 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. Together with STAT 400/ACSC 400X, covers the learning outcomes in the exam P of the Society of Actuaries (SOA), which is also the Exam 1 of the Casualty Actuarial Society (CAS). PRQ: STAT 400 or ACSC 400X or consent of department.

417X. APPLIED STATISTICAL LEARNING (3). *Crosslisted as STAT 417*. Modern statistical methods for supervised and unsupervised learning with an emphasis on model assessment, selection, and regularization. Practical problems are solved using statistical software packages. A particular emphasis is placed on high dimensional problems. PRQ: STAT 410 or consent of department.

437X. CATEGORICAL DATA ANALYSIS (3). *Crosslisted as STAT 437*. Contingency tables. Poisson, binomial, and multinomial regression techniques. PRQ: STAT 435.

438X. APPLIED TIME SERIES ANALYSIS (3). *Crosslisted as STAT 438*. Removal and estimation of trend and seasonality, autoregressive, moving average, and mixed models; model identification and estimation; diagnostic checking; and the use of time series models in forecasting. PRQ: STAT 435.

450. 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: ACSC 350, and ACSC 400X or STAT 400, or consent of department.

451. 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: ACSC 450.

* Available for general education credit.

455. LOSS MODELS I (3). Definition and selection of probability distributions appropriate for insurance data that are heavily tailed and skewed, such as Severity Model, Frequency Model, Aggregate Model, and Risk Measures. PRQ: STAT 410.

456. LOSS MODELS II (3). Estimation of parameters of probability distributions appropriate for insurance data that are heavy tailed and skewed; assessment of credibility of data for ratemaking, such as Construction and Selection of Parametric Models, Credibility, Insurance and Reinsurance Coverage and its pricing and reserving. PRQ: ACSC 455.

460. FINANCIAL DERIVATIVES (3). *Crosslisted as 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: ACSC 405.

491. 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 department.

496. ACTUARIAL INTERNSHIP (1-3). Work as an intern or in a department-approved co-op placement for a minimum of 100 hours per semester hour at an off-campus agency, or participate in the regular activities at the NIU Statistical Consulting Services. S/U grading. No more than 3 semester hours of STAT 495 or ACSC 496 can be counted toward NIU's required hours for graduation or toward NIU's 40 upper-division hour requirement. PRQ: Consent of department.

Statistics (STAT)

100. 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, statistics, or actuarial science majors or minors.

200. 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, statistics, or actuarial science. Not used in major GPA calculation for mathematical sciences, statistics, or actuarial science majors. PRQ: MATH 206 or MATH 210 or MATH 211 or MATH 229.

300. 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.

324X. INTRODUCTION TO BUSINESS DATA ANALYTIC TOOLS (3). *Crosslisted as OMIS 324*. Introduction to business analytic tools focusing on sampling, multivariate regression, factor analysis and cluster analysis to identify and solve business problems. PRQ: UBUS 223 or STAT 200.

400. PROBABILITY (3). *Crosslisted with ACSC 400X*. Probability spaces, random variables, discrete, continuous, mixed probability distributions, moment generating functions, multivariate distributions, conditional probability, conditional expectation, and special distributions. PRQ: MATH 232 and STAT 300, or consent of department. CRQ: MATH 240 or consent of department.

401. STOCHASTIC PROCESSES (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 400 or ACSC 400X or consent of department.

410. INTRODUCTION TO MATHEMATICAL STATISTICS I (3). Distributions of functions of random variables, laws of large numbers, central limit theorem, interval estimation, sufficiency, completeness, point estimation, principles of Bayesian estimation. PRQ: STAT 400 or ACSC 400X.

411. INTRODUCTION TO MATHEMATICAL STATISTICS II (3). Principles of statistical hypothesis testing including the likelihood ratio test, uniformly most powerful tests and Bayesian testing techniques, theory of linear models including multiple linear regression and ANOVA. PRQ: STAT 410.

415. COMPUTATIONAL METHODS IN STATISTICS (3). An introduction to the software commonly used in modern statistical methods. Applications will focus on statistical data analysis, data management, and simulation. PRQ: STAT 300.

417. APPLIED STATISTICAL LEARNING (3). *Crosslisted as ACSC 417X*. Modern statistical methods for supervised and unsupervised learning with an emphasis on model assessment, selection, and regularization. Practical problems are solved using statistical software packages. A particular emphasis is placed on high dimensional problems. PRQ: STAT 410 or consent of department.

419. NONPARAMETRIC STATISTICS (3). A study of statistical methods based on signs and ranks, including the sign test, the median test, the Mann-Whitney test, the Kruskal-Wallis test, Wolcoxon's signed ranks test, the Quade test, the Friedman test, the Durbin test, randomization tests, Kendall's tau, Spearman's rho, nonparametric linear regression, monotonic rank regression, Kolmogorov's goodness-of-fit test, and the Smirnov test. PRQ: STAT 300 or consent of department.

421. ELEMENTARY SURVEY SAMPLING (3). An introduction to sampling and the statistical analysis of surveys. Topics include simple random sampling, stratified sampling, systematic sampling, cluster sampling, ratio regression, difference estimation and population size estimation. PRQ: STAT 300 or consent of department.

425. 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 410.

435. APPLIED REGRESSION ANALYSIS (3). An in-depth examination of exploratory data analysis and graphical techniques, and statistical methods for linear regression analysis. Includes techniques for model selection, assessment of influential observations, and verification of model assumptions. PRQ: STAT 300.

436. DESIGN AND ANALYSIS OF EXPERIMENTS (3). Design and analysis of single, multifactor, factorial, nested, and randomized block designs. PRQ: STAT 435.

437. CATEGORICAL DATA ANALYSIS (3). *Crosslisted as ACSC 437X*. Contingency tables. Poisson, binomial, and multinomial regression techniques. PRQ: STAT 435.

438. APPLIED TIME SERIES ANALYSIS (3). *Crosslisted as ACSC 438X*. Removal and estimation of trend and seasonality, autoregressive, moving average, and mixed models; model identification and estimation; diagnostic checking; and the use of time series models in forecasting. PRQ: STAT 435.

490. 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. STATISTICS INTERNSHIP (1-3). Work as an intern or in a department approved co-op placement for a minimum of 100 hours per credit hour at an off-campus agency, or participate in the regular activities at the NIU Statistical Consulting Services. S/U grading. No more than 3 credit hours of STAT 495 or ACSC 496 can be counted toward NIU's required hours for graduation or toward NIU's 40 upper-division hour requirement. PRQ: Consent of department.

Statistics and Actuarial Science Faculty

Barbara Gonzalez, Ph.D., Cornell University, associate professor, chair

Lei Hua, Ph.D., University of British Columbia, associate professor

Alan Polansky, Ph.D., Southern Methodist University, associate professor

Duchwan Ryu, Ph.D., Texas A&M, associate professor

Yunran Wei, Ph.D., University of Waterloo, assistant professor

Michelle Xia, Ph.D., University of British Columbia, associate professor

Haiming Zhou, Ph.D., University of South Carolina, Columbia University, assistant professor

Department of World Languages and Cultures (FL--)

The Department of World Languages and Cultures offers major programs leading to the B.A. degree in World Languages and Cultures with emphases in French and Francophone Studies, German Studies, or Spanish and Hispanic Studies. Majors may gain licensure to teach at the secondary level in French, German, and/or Spanish.

The department offers a minor in World Languages and Cultures with options in Chinese, French, German, Italian, Japanese, Russian, Spanish, and Translation for Global Literacy. The department also participates in the interdisciplinary minors in classical studies, comparative literature, Latino/Latin American studies, linguistics, Southeast Asian studies, and women's, gender, and sexuality studies, and offers FLCL 271, Classical Mythology, FLFR 371, Masterpieces of French Literature in Translation, FLIT 272, The Italian Renaissance, and FLRU 361, Russian Culture and Literature for general education in the Knowledge Domain "Creativity and Critical Analysis." FLCL 271 and FLRU 361 are also part of the "Origins and Influences" Pathway.

Department Regulations

Students with high school credit in French, German, or Spanish who wish to continue in that language must gain placement into the appropriate course in the desired sequence by taking the foreign language placement examination. On the basis of this examination, the student must begin the chosen language sequence in the course indicated by the placement examination, disregarding that course's prerequisites. For example, a student gaining placement into FLFR 201 does not have to complete FLFR 101 or FLFR 102. Students with high school credit in one of the other languages offered by the department for which no placement test is available should see a Department of World Languages and Cultures adviser. 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.

For information on foreign language placement, see "Credit by Examination" section in the undergraduate catalog.

Majors in the Department of World Languages and Cultures

Students majoring in one foreign language may complete a second major emphasis in another language.

Majors in the Department of World Languages and Cultures may complete minors in languages other than the language of their major emphasis.

Recommendation for World Languages and Cultures Majors

Majors with an emphasis in French and Francophone Studies, German Studies, or Spanish and Hispanic Studies are urged to spend a minimum of one semester in study abroad.

Major in World Languages and Cultures (B.A.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. French and Francophone Studies

Core Requirements (11)

FLAL 300 - Introduction to World Languages and Cultures (1)
FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)

Choose three of the following (9)

^FLFR 301 - Breaking It Down: The Structure of French (3)

^FLFR 302 - Introduction to Translation (3)

FLFR 311 - Spoken French in a Cultural Context (3)

^FLFR 321 - Cultural Practices in France (3)

FLFR 322 - Cultural Practices in the Francophone World (3)

Elective course work from the following (24-27)

One elective may be a French History course

FLAL 415 - Internship in World Languages and Cultures (3)

FLAL 420 - Introduction to Translation Theory (3)

FLAL 483 - Applied Linguistics and the Romance Languages (3)

FLFR 300 - Special Topics in French Language, Literature, Linguistics, or Culture (3)

^FLFR 400 - Special Topics in French Language, Literature, Linguistics, or Culture (3)

^FLFR 411 - Communicating in Modern French (3)

^FLFR 412 - French for Business (3)

FLFR 430 - French and Francophone Film (3)

^FLFR 437 - Authors in Context (3)

^FLFR 440 - Postcolonial Studies and Francophone Culture (3)

^FLFR 445 - Feminism in French (3)

^FLFR 446 - Studies in French Genres (3)

^FLFR 463 - *La France Contemporaine* (3)

^FLFR 464 - Paris: City of Lights (3)

FLFR 465 - Experiments in Autobiography (3)

^FLFR 480 - French Publishing Atelier (3)

^FLFR 481 - Advanced French Phonetics and Phonology (3)

^FLFR 482 - History of the French Language (3)

^FLFR 483 - Translation Theory and Practice (3)

^FLFR 484 - Advanced Translation (3)

^HIST 311 - Early Modern France, 1500-1789 (3)

HIST 312 - France Since 1815 (3)

HIST 339 - French Overseas Empire (3)

HIST 423 - The French Revolution and Napoleon (3)

Total Hours for Emphasis 1, French and Francophone Studies: 38

Emphasis 2. German Studies

Core Requirements (8)

FLAL 300 - Introduction to World Languages and Cultures (1)

FLGE 301 - Putting it all Together: Going Beyond the Basics (3)

FLGE 311 - Spoken German in a Cultural Context (3)

FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)

* Available for general education credit.

^ This is a Writing Infused Course.

¹ May be waived on the basis of high school preparation or placement examination.

Choose three of the following (9)

- FLGE 300 - Special Topics in German Language, Literature, Linguistics or Culture (3)
- ^FLGE 302 - Reading, Writing, Translating (3)
- ^FLGE 320 - German Texts and Media (3)
- ^FLGE 321 - German Cultural and Literacy Topics Through the Centuries (3)
- ^FLGE 322 - Cultural and Literary Topics in German-Speaking Countries (3)

Elective course work from the following (18)

- FLAL 415 - Internship in Foreign Languages (3)
 - FLAL 420 - Introduction to Translation Theory (3)
 - FLGE 400 - Special Topics in German Language, Literature, Linguistics or Culture (3)
 - FLGE 411 - Communicating in Modern German (3)
 - ^FLGE 412 - Practical Business German (3)
 - ^FLGE 414 - German Business Communication (3)
 - FLGE 432 - German Literary Genres (3)
 - FLGE 433 - German Cinema (3)
 - FLGE 434 - Popular Literature in German-Speaking Countries (3)
 - FLGE 435 - Autobiographies (3)
 - FLGE 437 - Authors in Context (3)
 - ^FLGE 461 - German Cultural Studies: Reading Texts in Contexts (3)
 - ^FLGE 463 - *Deutschland Heute* (3)
 - ^FLGE 481 - Breaking it Down: The Structure of Modern German (3)
 - ^FLGE 482 - Approaches to Translation (3)
 - ^FLGE 484 - Translation Practice (3)
 - ^FLGE 485 - History of the German Language (3)
- Suggested electives outside the department:
- ENGL 207 - Fundamentals of English Grammar (3)
 - HIST 425 - World War II (3)
 - HIST 429 - Nazi Germany (3)

Total Hours for Emphasis 2, German Studies: 35

Emphasis 3. Spanish and Hispanic Studies**Core Requirements (17)**

- FLSP 301 - Advanced Spanish Grammar (3),
OR FLSP 315 - Spanish for Heritage Speakers II (3)
- ^FLSP 302 - Advanced Composition in Spanish (3)
- FLSP 311 - Advanced Spanish Conversation (3)
- ^FLSP 320 - Textual and Media Analysis (3)
- FLSP 480 - Introduction to Hispanic Linguistics (3)
- FLAL 300 - Introduction to World Languages and Cultures (1)
- FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)

Choose three to four of the following (9-12)

- ^FLSP 321 - Introduction to Spanish Literature (3),
OR ^FLSP 322 - Introduction to Spanish-American Literature (3)
- ^FLSP 361 - Spain Today (3),
OR ^FLSP 362 - Latin America Today (3)
- ^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, Culture and Film (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 - Seminar on the Cultures of Spain (3)
- *^FLSP 462 - Seminar on the Cultures of Latin America (3)
- ^FLSP 463 - Hispanic Culture Through Film (3)

Choose three to four of the following (9-12)

- FLAL 415 - Internship in World Languages and Cultures (3)
- ^FLAL 420 - Introduction to Translation Theory (3)
- ^FLAL 483 - Applied Linguistics and the Romance Languages (3)
- FLSP 412 - Advanced Oral Proficiency in Spanish (3)
- FLSP 414 - Spanish Business Communications (3)
- FLSP 481 - Spanish Phonology (3)
- ^FLSP 483 - Techniques of Translation (3)
- ^FLSP 484 - Advanced Translation (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 489 - Consecutive Interpretation: Theory and Practice (3)
- ^FLSP 491 - History of the Spanish Language (3)

Total Hours for Emphasis 3, Spanish and Hispanic Studies: 38

Educator Licensure - World Languages and Cultures

Students majoring in World Languages and Cultures with an emphasis in French and Francophone Studies, German Studies, or Spanish and Hispanic Studies who seek licensure to teach a language in grades PK-12 should consult with the World Languages and Cultures Educator Licensure office at the earliest possible opportunity. Educator licensure involves significant requirements in addition to the completion of a language degree and university general education requirements.

Procedures

Declare a major in World Languages and Cultures with an emphasis French and Francophone Studies, German Studies, or Spanish and Hispanic Studies. Consult each semester with the major adviser.

Consult with the World Languages and Cultures Educator Licensure office at the time the major is declared and at the beginning of each semester thereafter.

Apply for the first clinical course, ILAS 201, in March or October prior to the semester in which you wish to take it.

A study abroad experience is highly recommended for all students in the World Languages and Cultures educator licensure program.

Students are admitted to the Educator Licensure program when they have:

- completed the written application for admission to the program, and a satisfactory interview,
- 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 licensed, with grades of C or above in all required courses,
- successfully completed ILAS 201 or equivalent, and
- earned a grade of at least B in an Advanced Grammar course in the major language.

Retention

Students admitted to the program must maintain the GPA requirements of 2.75 overall and 3.00 in the world languages and cultures major, and display appropriate professional dispositions at all times.

^ This is a Writing Infused Course.

* Fulfills the Human Diversity Requirement.

¹ May be waived on the basis of high school preparation or placement examination.

Requirements in Department

Educator licensure students are required to take all the regular courses for an emphasis in French and Francophone Studies, German Studies, or Spanish and Hispanic Studies, in addition to choosing specific culture and linguistics courses as upper-level electives. Educator licensure students consult regularly with both the major adviser and the World Languages and Cultures Educator Licensure office when choosing courses.

For all majors: FLMT 401, FLMT 490, FLMT 491, and FLPT 485 (student teaching).

Requirements outside Department

Prerequisites:

The following prerequisites should be taken as part of the B.A.:

a college-level English grammar course (at least 3 credits or proof of having tested out;

*PSYC 102 - Introduction to Psychology (3);

Other requirements outside of department

A study abroad experience. Please see the adviser for information on which of the required courses for the major can be taken abroad. Students who elect not to study abroad must take one approved course outside the department focusing on the target cultures, including, but not limited to an ANTH, ARTH, GEOG, HIST, POLS, or SOCI course.

Education course work in foundations of education, human development and learning, classroom management, teaching exceptional students, and teaching English Language Learners, as well as any required prerequisites for these courses. Consult with the World Languages and Cultures Educator Licensure office about which courses are approved for satisfying this requirement.

Clinical courses

ILAS 201 - Introductory Clinical Experience (1) or equivalent

ILAS 301 - Second Clinical Experience (1)

Additional tests required for licensure, such as the state Content Area Test, ACTFL Oral Proficiency Interview, and Teacher Performance Assessment (edTPA).

Accelerated B.A./J.D. Program in World Languages and Cultures and Law

Admission

The six-year accelerated program leads to both the B.A. in World Languages and Cultures and J.D. degrees. Students who want to complete this program must identify themselves to the World Languages and Cultures Department as majors who will complete the 3+3 Program. Undergraduates who major in World Languages and Cultures and have completed at least 90 semester hours of undergraduate course work (including all general education and major requirements) with a minimum GPA of 3.25 are eligible to apply for admission to NIU's College of Law under the special provisions of this program. As part of the application to the College of Law, applicants must take the LSAT and must receive a score at or above the 50th percentile of the previous year's matriculating law class. Applicants are strongly advised to take the LSAT and submit their application to the College of Law no later than February 15 of the applicant's junior year. Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of the applicants to the program, the number and quality of applicants to the College of Law in general, as well as other factors normally considered in admissions decisions by the College of Law.

Curriculum

Students must complete all the requirements of the World Languages and Cultures degree as well as all general education requirements by the end of their junior year. Students accepted into the College of Law pursuant to the special provisions of this program will matriculate in the College of Law in the fall of their senior year. Up to 30 hours of law 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

Students who wish to earn a baccalaureate degree with honors in world languages and cultures 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 World Languages and Cultures.

Honors in world languages and cultures 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.

Minor in World Languages and Cultures

Majors may complete minors in other language options.

Option: 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)

Electives (6)

Two of the following (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 T'ang Dynasty (3)

*HIST 346 - Women in Asian History (3)

^HIST 445 - The Chinese Revolution (3)

*HIST 470 - America and Asia (3)

HIST 491J - 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.

Option: Deaf Studies (24)

Required (15)

FLSL 101 - Beginning American Sign Language I (3)

FLSL 102 - Beginning American Sign Language II (3)

FLSL 201 - Intermediate American Sign Language I (3)

FLSL 202 - Intermediate American Sign Language II (3)

FLSL 361 - Deaf Culture (3)

Electives (choose three courses from among the following) (9)

FLSL 105 - Fingerspelling, Numbers, and Classifiers in ASL (3)

FLSL 311 - Advanced American Sign Language Conversation (3)

FLSL 321 - ASL Literature and Arts (3)

FLSL 325 - Introduction to the Linguistics of American Sign Language (3)

FLSL 400 - Special Topics in American Sign Language (3)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

The department strongly suggests a study abroad experience.
Nine or more semester hours in the minor must be taken at NIU.

Option: French and Francophone Studies (24)

Check departmental information for any additional requirements.

Requirements (12)

FLFR 101 - Beginning French I (3)
FLFR 102 - Beginning French II (3)
FLFR 201 - Intermediate French I (3)
FLFR 202 - Intermediate French II (3)

Course work from the following (9)

FLFR 301 - Breaking it Down: The Structure of French (3)
FLFR 302 - Introduction to Translation (3)
FLFR 311 - Spoken French in a Cultural Context (3)
FLFR 312 - *Parlons Français*: Applied French Phonetics (3)
FLFR 321 - Cultural Practices in France (3)
FLFR 322 - Cultural Practices in the Francophone World (3)

Choose one elective from the following (3)

FLFR 300 - Special Topics in French Language, Literature, Linguistics, or Culture (3)
FLFR 400 - Special Topics in French Language, Literature, Linguistics, or Culture (3)
FLFR 411 - Communicating in Modern French (3)
FLFR 412 - French for Business (3)
FLFR 430 - French and Francophone Film (3)
FLFR 437 - Authors in Context (3)
FLFR 440 - Postcolonial Studies and Francophone Culture (3)
FLFR 445 - Feminism in French (3)
FLFR 446 - Studies in French Genres (3)
FLFR 463 - *La France Contemporaine* (3)
FLFR 464 - Paris: City of Lights (3)
FLFR 465 - Experiments in Autobiography (3)
FLFR 480 - French Publishing Atelier (3)
FLFR 481 - Advanced French Phonetics and Phonology (3)
FLFR 482 - History of the French Language (3)
FLFR 483 - Translation Theory and Practice (3)
FLFR 484 - Advanced Translation (3)
^HIST 311 - Early Modern France, 1500-1789 (3)
HIST 312 - France Since 1815 (3)
^HIST 339 - French Overseas Empire (3)
HIST 423 - The French Revolution and Napoleon (3)

Nine or more semester hours in the minor must be taken at NIU.

Option: German Studies (24)

Check departmental information for any additional requirements.

Requirements (12)

FLGE 101 - Beginning German I: Personal World (3)
FLGE 102 - Beginning German II: The German-Speaking World (3)
FLGE 201 - Intermediate German I: Topics in Culture (3)
FLGE 202 - Intermediate German II: The Postwar Era (3)

Course work from the following (12)

FLGE 301 - Putting it all Together: Going Beyond the Basics (3)
^FLGE 302 - Reading, Writing, Translating (3)
FLGE 311 - Spoken German in a Cultural Context (3)
^FLGE 320 - German Texts and Media (3)
^FLGE 321 - German Cultural and Literary Topics Through the Centuries (3)
^FLGE 322 - Cultural and Literary Topics in German-Speaking Countries (3)

Choose one elective from the following (3)

FLGE 300 - Special Topics in German Language, Literature, Linguistics or Culture (3)
FLGE 400 - Special Topics in German Language, Literature, Linguistics or Culture (3)
FLGE 411 - Communicating in Modern German (3)

^FLGE 412 - Practical Business German (3)
^FLGE 414 - German Business Communication (3)
FLGE 432 - German Literary Genres (3)
FLGE 433 - German Cinema (3)
FLGE 434 - Popular Literature in German-Speaking Countries (3)
FLGE 435 - Autobiographies (3)
FLGE 437 - Authors in Context (3)
^FLGE 461 - German Cultural Studies: Reading Texts in Contexts (3)
^FLGE 463 - *Deutschland Heute* (3)
^FLGE 481 - Breaking it Down: The Structure of Modern German (3)
^FLGE 482 - Approaches to Translation (3)
^FLGE 484 - Translation Practice
^FLGE 485 - History of the German Language (3)
HIST 429 - Nazi Germany (3)

Nine or more semester hours in the minor must be taken at NIU.

Option: Italian Language and Culture (24)

Requirements

FLIT 101 and FLIT 102¹ - Beginning Italian I and II (6)
FLIT 201 and FLIT 202¹ - Intermediate Italian I and II (6)
FLIT 311 - Spoken Italian in a Cultural Context (3)
Choose three from the following, one can be from ENGL (9)
^ENGL 318 - Exploring Human Language (3)
ENGL 483 - Renaissance Literature (3)
FLIT 272 - The Italian Renaissance (3)
FLIT 300 - Special Topics in Italian Language, Literature, Linguistics or Culture (3)
FLIT 301 - Advanced Italian Grammar and Composition (3)
FLIT 321 - Masterpieces of Italian Literature (3)
FLIT 400 - Special Topics in Italian Language, Literature, Linguistics or Culture (3)

Nine semester hours in the minor must be taken at NIU.

Option: Japanese Studies (24)

Requirements (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 - Spoken Japanese in a Cultural Context (3)
^FLJA 361 - Introduction to Japanese Culture (3)

Electives (6)

Two of the following (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 400 - Special Topics in Japanese Language, Literature, Linguistics, or Culture (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 491J - 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.

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

¹ May be waived on the basis of high school preparation or placement examination.

Option: Russian Studies (24)**Requirements (12)**

FLRU 101 - Beginning Russian I (3)
 FLRU 102 - Beginning Russian II (3)
 FLRU 201 - Intermediate Russian I (3)
 FLRU 202 - Intermediate Russian II (3)

Four electives to be chosen from the following; three must be from FLRU (12):

FLRU 300 - Special Topics in Russian Language, Literature, Linguistics or Culture (3)
 FLRU 301 - Breaking it Down: Writing in Russian (3)
 FLRU 311 - Spoken and Written Russian in a Cultural Context (3)
 FLRU 321 - Masterpieces of Russian Literature (3)
 FLRU 361 - Russian Culture and Literature (3)
 FLRU 400 - Special Topics in Russian Language, Literature, Linguistics or Culture (3)
 FLRU 412 - Business Russian (3)
 FLRU 431 - Russian Literary Giants: The Golden Ages (3)
 FLRU 432 - Russian Women Writers: Challenging the Status Quo (3)
 FLRU 433 - Breaking Taboos and Experimenting: Russian Modernism (3)
 FLRU 434 - 20th and 21st Century Russian Literature (3)
 FLRU 461 - Contemporary Russian Culture through Media (3)
 FLRU 480 - Modern Russian (3)
 HIST 336 - Russia to 1861 (3)
 HIST 337 - Russia since 1861 (3)
 ^HIST 434 - The Russian Revolution (3)
 ^HIST 435 - Stalinism (3)

Six or more semester hours in the minor must be taken at NIU.

Option: Spanish and Hispanic Studies (18)

Check departmental information for any additional requirements.

Requirements (6)

FLSP 301 - Advanced Spanish Grammar (3),
 OR FLSP 315 - Spanish for Heritage Speakers II (3)
 ^FLSP 320 - Intensive Reading and Introduction to Literary Textual and Media Analysis (3)

Complete four additional Spanish courses at the 300 and 400 level.
 At least one course needs to be at the 400 level. (9-12)

Nine or more semester hours in the minor must be taken at NIU.

Option: Translation for Global Literacy (24)**Requirements (12)**

For students completing the minor option in Translation for Global Literacy, all translation courses (II) and language/linguistic courses (III) should be in the same language.

I. Required

FLAL 420 - Introduction to Translation Theory (3)

II. Required: Translation courses

Choose two to three courses from the following list (6-9):

For French majors/minors

FLFR 302 - Introduction to Translation (3)
 FLFR 483 - Translation Theory and Practice (3)
 FLFR 484 - Advanced Translation (3)

For German majors/minors

FLGE 302 - Advanced German Composition and Translation (3)
 FLGE 482 - Approaches to Translation (3)
 FLGE 484 - Translation Practice (3)

For Spanish majors/minors

FLSP 483 - Techniques of Translation (3)
 FLSP 484 - Advanced Translation (3)
 FLSP 489 - Consecutive Interpretation: Theory and Practice (3)

III. Required: Language and Linguistics courses

Choose two to three courses from the following list (6-9):

ENGL 207 - Fundamentals of English Grammar (3)

For French majors/minors

FLFR 301 - Breaking It Down: The Structure of French (3)
 FLFR 411 - Communicating in Modern French (3)
 FLFR 412 - French for Business (3)

For German majors/minors

FLGE 301 - Putting it all together: Going Beyond the Basics (3)
 FLGE 412 - Practical Business German (3)
 FLGE 481 - The Structure of Modern German (3)

For Spanish majors/minors

FLSP 301 - Advanced Spanish Grammar (3),
 OR FLSP 315 - Spanish for Heritage Speakers II (3)
 FLSP 302 - Advanced Composition in Spanish (3)
 FLSP 414 - Spanish Business Communications (3)
 FLSP 480 - Introduction to Hispanic Linguistics (3)

IV. Required Translation Capstone or Internship (3)

FLAL 415 - Internship in World Languages and Cultures (3) (topic: translation)

OR

FLAL 421 - Senior Capstone in Translation (3)

Students will take this course during their last semester of enrollment in the Translation for Global Literacy option. In consultation with the instructor, they will be assigned a translation project and will submit a final report and translation, which will reflect the work they have done in previous semesters.

V. Optional

Choose one elective from this group (3)

ANTH 363 - Globalization and Corporate Cultures (3)
 ANTH 427 - Economic Anthropology (3)
 COMS 361 - Business and Professional Communication (3)
 COMS 362 - Intercultural Communication (3)
 MGMT 333 - Principles of Management (3)
 MGMT 346 - Business Communication (3)
 MKTG 295 - Principles of Marketing (3)
 MKTG 325 - Buyer Behavior (3)
 MKTG 345 - Business Marketing (3)
 MKTG 350 - Principles of Selling (3)
 MKTG 355 - Multichannel Direct Marketing (3)
 MKTG 365 - Principles of Retailing (3)
 MKTG 367 - Principles of Global Marketing (3)
 MKTG 370 - Principles of Digital Marketing (3)
 MKTG 387 - International Study in Marketing (3)
 MKTG 448 - Integrated Marketing Communications (3)
 NNGO 429 - International NGOs and Globalization (3)

VI. Optional

Study Abroad at or above the 300-level

Highly recommended.

Course List**French (FLFR)**

101. BEGINNING FRENCH I (3). Fundamentals of grammar, composition, and conversation. Intended for students with less than one year of high school French.

102. BEGINNING FRENCH II (3). Continuation of FLFR 101. PRQ: FLFR 101. Generally appropriate for those with one year of high school French; appropriate score on the placement test is required, or consent of department.

201. INTERMEDIATE FRENCH I (3). Further development of grammar, composition, reading, and cultural awareness to increase language mastery. PRQ: FLFR 102. Generally appropriate for those with two years of high school French; appropriate score on the placement test is required, or consent of department.

^ This is a Writing Infused Course.

* Fulfills the Human Diversity Requirement.

202. INTERMEDIATE FRENCH II (3). Further developing skills of reading, writing, listening and speaking. Study of French and Francophone culture and civilization through a variety of media. PRQ: FLFR 201. Generally appropriate for those with three years of high school French; appropriate score on the placement test is required, or consent of department.

300. SPECIAL TOPICS IN FRENCH LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

301. BREAKING IT DOWN: THE STRUCTURE OF FRENCH (3). Exploration of core areas of French grammar and associated linguistic concepts. PRQ: FLFR 202.

302. INTRODUCTION TO TRANSLATION (3). Exploration of the vast field of translation studies and its practical applications. Understanding of French grammar and culture is enhanced by translating from a wide range of genres, including literature, journalism, marketing, as well as more popular cultural forms. PRQ: FLFR 202.

311. SPOKEN FRENCH IN A CULTURAL CONTEXT (3). Development of oral skills necessary to converse competently and convincingly on a range of topics, both of an everyday nature (sports, weather, gossip, pop culture) and of a more pressing concern (social inequality, globalization, global warming). PRQ: FLFR 202.

312. *PARLONS FRANÇAIS*: APPLIED FRENCH PHONETICS (3). Intensive course on French pronunciation with an introduction to phonetics to give students a better understanding of the differences between the French and English sound systems and to help them accurately perceive and produce French sounds. PRQ: FLFR 202 or consent of department.

321. CULTURAL PRACTICES IN FRANCE (3). Survey of cultural practices in France, with a focus on literary, artistic, cinematic, and popular works of historical importance. PRQ: FLFR 202 or consent of department.

322. CULTURAL PRACTICES IN THE FRANCOPHONE WORLD (3). Survey of cultural practices from the Francophone world (excluding France), with a focus on literary, artistic, cinematic and popular works of historical importance from various regions, including North Africa, the Caribbean, Western Europe, North America, and Southwest Asia. PRQ: FLFR 202 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.

400. SPECIAL TOPICS IN FRENCH LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

411. COMMUNICATING IN MODERN FRENCH (3). Advanced conversation and composition focusing on the comprehension and usage of contemporary French in day-to-day communication, including formal and informal language, world varieties of French, and French slang. PRQ: Two 300-level French courses or consent of department.

412. FRENCH FOR BUSINESS (3). Study of select business and administrative aspects of French, such as writing a resume and cover letter, answering interview questions, and composing professional communications. PRQ: Two 300-level French courses or consent of department.

430. FRENCH AND FRANCOPHONE FILM (3). Examination of the major trends and topics in French and Francophone cinema, from its inception to the present day. PRQ: Two 300-level French courses or consent of department.

437. AUTHORS 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: Two 300-level French courses or consent of department.

440. POSTCOLONIAL STUDIES AND FRANCOPHONE CULTURE (3). General treatment of the works of Francophone writers from one of the following regions: French Caribbean, the Maghreb, or French-speaking Americas. PRQ: Two 300-level French courses or consent of department.

445. FEMINISM IN FRANCE (3). Study of the role of women in French society from the medieval period to the present through the lens of various feminist movements. PRQ: Two 300-level French courses 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: Two 300-level French courses or consent of department.

463. *LA FRANCE CONTEMPORAINE* (3). Political, social, and cultural development of modern-day France. PRQ: Two 300-level French courses or consent of department.

464. PARIS: CITY OF LIGHTS (3). Study of urban changes in Paris from the Middle Ages to the present. PRQ: Two 300-level French courses or consent of department.

465. EXPERIMENTS IN AUTOBIOGRAPHY (3). Exploration of a diverse set of autobiographical forms from the Renaissance to the contemporary period. Taking inspiration from the course work, students create an autobiography in French. PRQ: Two 300-level French courses 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: Two 300-level French courses or consent of department.

481. ADVANCED FRENCH PHONETICS AND PHONOLOGY (3). Detailed exploration of the sound system of French, including what sounds make up the French language, how to transcribe French words using the International Phonetic Alphabet, and understanding the rules that govern pronunciation. PRQ: Two 300-level French courses 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: Two 300-level French courses or consent of department.

483. TRANSLATION THEORY AND PRACTICE (3). Analysis of translation as a linguistic practice and a metaphor for cultural exchange. PRQ: Two 300-level French courses or consent of department.

484. ADVANCED TRANSLATION (3). Addresses practical steps of becoming a professional translator or interpreter while developing the appropriate skills for working in the field. PRQ: Two 300-level French courses or consent of department.

Italian (FLIT)

101. BEGINNING ITALIAN I (3). Fundamentals of grammar, composition, and conversation. Intended for students with less than one year of high school Italian.

102. BEGINNING ITALIAN II (3). Continuation of FLIT 101. PRQ: Generally appropriate for those with one year of high school Italian; appropriate score on the placement test is required, FLIT 101, or consent of department.

201. INTERMEDIATE ITALIAN I (3). Review of grammar, work in composition and the reading of modern Italian authors, to develop language mastery. PRQ: Generally appropriate for those with two years of high school Italian; appropriate score on the placement test is required, FLIT 102, or consent of department.

202. INTERMEDIATE ITALIAN II (3). Further developing reading, writing, listening and speaking. Study of Italian culture and civilization through a variety of media. PRQ: Generally appropriate for those with three years of high school Italian; appropriate score on the placement test is required, FLIT 201, or consent of department.

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.

300. SPECIAL TOPICS IN ITALIAN LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

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.

400. SPECIAL TOPICS IN ITALIAN LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

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. BEGINNING SPANISH I (3). Fundamentals of grammar, composition, conversation, and culture. Intended for students with less than one year of high school Spanish.

102. BEGINNING SPANISH II (3). Continuation of FLSP 101. PRQ: Generally appropriate for those with one year of high school Spanish; appropriate score on the placement test is required, FLSP 101, or consent of department.

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. No previous knowledge of Spanish required.

201. INTERMEDIATE SPANISH I (3). Further development of grammar, composition, reading, and cultural awareness to increase language mastery. PRQ: Generally appropriate for those with two years of high school Spanish; appropriate score on the placement test is required, FLSP 102, or consent of department.

202. INTERMEDIATE SPANISH II (3). Further developing skills of reading, writing, listening and speaking. Study of Hispanic culture and civilization through a variety of media. PRQ: Generally appropriate for those with three years of high school Spanish; appropriate score on the placement test is required, FLSP 201, or consent of department.

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.

215. SPANISH FOR HERITAGE SPEAKERS I (3). For native speakers of Spanish. Emphasis on formal written Spanish, 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 students with prior credit in FLSP 202. May be used to satisfy the foreign language requirement for the B.A. degree. PRQ: Consent of department.

300. SPECIAL TOPICS IN SPANISH LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. 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. SPOKEN SPANISH IN A CULTURAL CONTEXT (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLSP 202 and FLSP 211, or FLSP 215.

315. SPANISH FOR HERITAGE SPEAKERS II (3). Continues to develop understanding, reading, and writing skills in Spanish for students who have successfully completed FLSP 215 or equivalent or have the requisite skills. Not available for students with credit in FLSP 301. PRQ: FLSP 215 or consent of department.

320. TEXTUAL AND MEDIA 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. INTRODUCTION TO SPANISH LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLSP 320.

322. INTRODUCTION TO SPANISH-AMERICAN LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLSP 320.

361. SPAIN TODAY (3). Overview of contemporary Spanish culture and its roots 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. LATIN AMERICA TODAY (3). Overview of contemporary Latin-American culture and its roots 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.

400. SPECIAL TOPICS IN SPANISH LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

412. ADVANCED ORAL PROFICIENCY IN SPANISH (3). Development of oral skills necessary to achieve advanced low Spanish oral proficiency. Vocabulary development and intensive oral practice designed to enable learners to consistently narrate and describe in all time frames, as well as handle a situation with a complication. Development of presentational communication skills is also emphasized. PRQ: FLSP 311 or consent of department.

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 or FLSP 322.

432. MEDIEVAL SPANISH LITERATURE (3). Through the 15th century. PRQ: FLSP 321 or FLSP 322, or consent of department.
433. CLASSICAL SPANISH DRAMA (3). PRQ: FLSP 321 or FLSP 322, or consent of department.
434. CERVANTES: THE QUIXOTE (3). PRQ: FLSP 321 or FLSP 322, or consent of department.
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 or FLSP 322, or consent of department.
436. SPANISH ROMANTICISM AND REALISM (3). PRQ: FLSP 321 or FLSP 322, or consent of department.
437. THE GENERATION OF 1898/*FIN DE SIGLO* (3). PRQ: FLSP 321 or FLSP 322, or consent of department.
438. CONTEMPORARY SPANISH LITERATURE (3). PRQ: FLSP 321 or FLSP 322, or consent of department.
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 321 or 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 321 or 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 321 or 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 321 or FLSP 322, or consent of department.
454. MEXICAN LITERATURE, CULTURE AND FILM (3). GEExplore Mexico's literary traditions and cultures through fiction, non-fiction, dramatic works, and film. Selected readings with emphasis on the 20th century. PRQ: FLSP 321 or FLSP 322, or consent of department.
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 321 or FLSP 322, or consent of department.
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 321 or FLSP 322, or consent of department.
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 321 or 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 321 or 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 321 or 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 321 or FLSP 322, or consent of department.
461. SEMINAR ON THE CULTURES OF SPAIN (3). Analysis of a series of documents (literary texts, film, advertisements, newspapers, and magazines among others) in order to understand the basis of the construction of Spain's historical, political, and cultural identity. PRQ: FLSP 320 or FLSP 361 or FLSP 362, or consent of department.
462. SEMINAR ON THE CULTURES OF LATIN AMERICA (3). Analysis of scholarly texts, interpretive essays, other primary sources, and a variety of cultural artifacts (such as films, music, art objects, literary texts) in order to explore Latin America's cultural heritage. PRQ: FLSP 320 or FLSP 361 or FLSP 362, or consent of department.
463. HISPANIC CULTURE THROUGH FILM (3). Introduction to contemporary Hispanic culture through the study of film. Taught in Spanish. PRQ: FLSP 320 or 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 480 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 or consent of department.
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 480 or consent of department.
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 or consent of department.
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 or consent of department.

Portuguese (FLPO)

103. BEGINNING PORTUGUESE I (5). Development of skills in comprehension, speaking, reading, and writing.

104. BEGINNING PORTUGUESE II (5). Continuation of FLPO 103. PRQ: FLPO 103 or consent of department.

201. INTERMEDIATE PORTUGUESE I (3). Deepening and broadening of students' knowledge of the Portuguese grammatical structure and lexicon and of Portuguese, Brazilian, and Luso-African culture in general. PRQ: FLPO 104 or consent of department.

202. INTERMEDIATE PORTUGUESE II (3). Further developing skills in listening, speaking, reading, and writing. Study of Portuguese, Brazilian, and Luso-African culture and civilization through a variety of media. 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: PERSONAL WORLD (3). Fundamentals of grammar, composition, and syntax. Reading and discussion of a variety of text types, with practice in speaking and writing. Thematic focus on themes around personal world.

102. BEGINNING GERMAN II: THE GERMAN-SPEAKING WORLD (3). Continuation of FLGE 101. Thematic focus on Austria, Germany, and Switzerland. PRQ: Generally appropriate for those with one year of high school German; appropriate score on the placement test is required, FLGE 101, or consent of department.

201. INTERMEDIATE GERMAN I: TOPICS IN CULTURE (3). Review of grammar, structure, and syntax. Reading and discussion of a variety of text types, with practice in speaking and writing. Thematic focus on Swiss, German, and Austrian culture and civilization through a variety of media. PRQ: Generally appropriate for those with two years of high school German; appropriate score on the placement test is required, FLGE 102, or consent of department.

202. INTERMEDIATE GERMAN II: THE POSTWAR ERA (3). Further developing skills in listening, speaking, reading, and writing. Focus on the German postwar era through texts and films. PRQ: Generally appropriate for those with three years of high school German; appropriate score on the placement test is required, FLGE 201, or consent of department.

300. SPECIAL TOPICS IN GERMAN LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

301. PUTTING IT ALL TOGETHER: GOING BEYOND THE BASICS (3). Expanding upon students' knowledge of German vocabulary and grammar in context. Emphasis on points of conflict between English and German. PRQ: FLGE 202 or consent of department.

302. READING, WRITING, TRANSLATING (3). Enhancing students' understanding of German through exposure to a variety of media with emphasis on translation from German to English and English to German. PRQ: FLGE 202.

311. SPOKEN GERMAN IN A CULTURAL CONTEXT (3). Development of oral skills necessary to converse competently and convincingly on a range of topics, both of an everyday nature (such as sports, weather, gossip, pop culture) and of a more pressing concern (such as social inequality, globalization, global warming). 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 while focusing on the contemporary context. PRQ: FLGE 202.

321. GERMAN CULTURAL AND LITERARY TOPICS THROUGH THE CENTURIES (3). Survey of cultural practices in Germany with a focus on literary, artistic, cinematic, and popular works of historical importance. PRQ: FLGE 202 or consent of department.

322. CULTURAL AND LITERARY TOPICS IN GERMAN-SPEAKING COUNTRIES (3). Survey of cultural practices in German-speaking countries with a focus on literary, artistic, cinematic, and popular works of historical importance. PRQ: FLGE 202 or consent of department.

400. SPECIAL TOPICS IN GERMAN LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

411. COMMUNICATING IN MODERN GERMAN (3). Advanced conversation and composition course focusing on the understanding of modern German in day-to-day communication, including formal and informal language, dialects and slang. 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. Extensive practice in the writing of business correspondence and formal presentations. 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. GERMAN LITERARY GENRES (3). An in-depth study of genres such as drama, novel, novella, lyric, and film. Taught in German. PRQ: Two 300-level German Courses or consent of department.

433. GERMAN CINEMA (3). Overview of German cinema through the analysis of films. Films from a variety of periods of German cinematic history will be screened and discussed. Taught in German. PRQ: Two 300-level German Courses or consent of department.

434. POPULAR LITERATURE IN GERMAN-SPEAKING COUNTRIES (3). Reading and analysis of popular German texts, covering a variety of *Textsorten*. Taught in German. PRQ: Two 300-level German Courses or consent of department.

435. AUTOBIOGRAPHIES (3). Explorations of different sets of autobiographical forms. Taking inspiration from the readings, autobiographies will be created in German. PRQ: Two 300-level German Courses or consent of department.

437. AUTHORS IN CONTEXT (3). Study of authors within their historical, political, and cultural contexts. Taught in German. May be repeated to a maximum of 6 semester hours. PRQ: Two 300-level German Courses or consent of department.

461. GERMAN CULTURAL STUDIES: READING TEXTS IN CONTEXTS (3). Focus on the central role that culture plays in fostering and understanding German society through a variety of media such as fiction, film, magazines, blogs, and music. 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 with emphasis on the developments since the reunification of 1990 using German media in print and screen. PRQ: Two 300-level German courses or consent of department.

481. BREAKING IT DOWN: THE STRUCTURE OF MODERN GERMAN (3). Examination of core areas of German linguistic concepts 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. BEGINNING LATIN I (3). Grammar and simple readings from Latin authors. Intended for students with no more than one year of high school Latin.

102. BEGINNING 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 or consent of department.

202. INTERMEDIATE LATIN II (3). Further developing skills in listening, speaking, reading, and writing. Study of classical culture and civilization through a variety of media. PRQ: FLCL 201 or consent of department.

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: FLCL 202 or consent of department.

Russian (FLRU)

101. BEGINNING RUSSIAN I (3). Fundamentals of grammar, composition, and conversation. Intended for students with less than one year of high school Russian.

102. BEGINNING RUSSIAN II (3). Continuation of FLRU 101. PRQ: Generally appropriate for those with one year of high school Russian; appropriate score on the placement test is required, FLRU 101, or consent of department.

201. INTERMEDIATE RUSSIAN I (3). Work in conversation, composition, and the reading of modern Russian authors to develop language mastery. PRQ: Generally appropriate for those with two years of high school Russian; appropriate score on the placement test is required, FLRU 102, or consent of department.

202. INTERMEDIATE RUSSIAN II (3). Further developing skills in listening, speaking, reading, and writing. Study of Russian culture and civilization through a variety of media. PRQ: Generally appropriate for those with three years of high school Russian; appropriate score on the placement test is required, FLRU 201, or consent of department.

300. SPECIAL TOPICS IN RUSSIAN LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

301. BREAKING IT DOWN: WRITING IN RUSSIAN (3). Putting writing practice in its grammatical context. PRQ: FLRU 202 or consent of department.

311. SPOKEN AND WRITTEN RUSSIAN IN A CULTURAL CONTEXT (3). Development of oral and written skills necessary to interact competently on a range of topics. PRQ: FLRU 202 or consent of department.

321. MASTERPIECES OF RUSSIAN LITERATURE (3). Introduction to literary analysis, based upon works chosen from the 19th and 20th centuries representing the principal genres. Taught in English.

361. 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.

400. SPECIAL TOPICS IN RUSSIAN LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

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. RUSSIAN LITERARY GIANTS: THE GOLDEN AGE (3). Readings, lectures, and discussion of Golden Age writers, such as Gogol and Pushkin, 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. BREAKING TABOOS AND EXPERIMENTING: RUSSIAN MODERNISM (3). Readings, lectures, and discussion of masterpieces of the modernist period. Taught in English.

434. 20TH AND 21ST CENTURY RUSSIAN LITERATURE (3). Readings, lectures, and discussion of works by major authors of the 20th and 21st centuries in various genres. Taught in English.

461. CONTEMPORARY RUSSIAN CULTURE THROUGH MEDIA (3). Application of student's linguistic skills in areas of topical interest relating to Russian culture. Better understanding of contemporary Russian 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). Further developing skills in listening, speaking, reading, and writing. Study of Japanese culture and civilization through a variety of media. PRQ: FLJA 201 or consent of department.

300. SPECIAL TOPICS IN JAPANESE LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: 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. SPOKEN JAPANESE IN A CULTURAL CONTEXT (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.

400. SPECIAL TOPICS IN JAPANESE LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

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.

American Sign Language (FLSL)

101. BEGINNING 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. BEGINNING AMERICAN SIGN LANGUAGE II (3). Continuation of FLSL 101 emphasizing the improvement of communicative skills. Three hours of lecture and one hour of laboratory. PRQ: FLSL 101 or consent of school.

105. FINGERSPELLING, NUMBERS, AND CLASSIFIERS IN AMERICAN SIGN LANGUAGE (3). Emphasis placed on how to use and understand fingerspelling, numbers, classifiers, and how to make and understand appropriate changes in handshapes and patterns. Provides hands-on experiences and skill-building activities needed for appropriate method to develop an understanding of the context behind the method used. Taught in American Sign Language. PRQ: FLSL 101 or consent of department.

201. INTERMEDIATE AMERICAN SIGN LANGUAGE I (3). Continuation of FLSL 102, with emphasis on developing fluency in American Sign Language. Three hours of lecture and one hour of laboratory. PRQ: FLSL 102 or consent of department.

202. INTERMEDIATE AMERICAN SIGN LANGUAGE II (3). Continuation of FLSL 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: FLSL 201 or consent of department.

311. ADVANCED AMERICAN SIGN LANGUAGE CONVERSATION (3). The incorporation of knowledge in American Sign Language (ASL) grammar and vocabulary, previously taught in intensive practical training in conversational skills, to achieve fluency of structural knowledge and expression. Conversational topics will include academics, business, medical, sports, religion, current events, and more. Taught in American Sign Language. PRQ: FLSL 202 or consent of department.

321. ASL LITERATURE AND ARTS (3). Examination and analysis of contents, themes, and techniques of work from different areas of literature and the arts. Emphasis on practices in planning, developing, performing and critiquing various works in different genres. Taught in American Sign Language. PRQ: FLSL 202 or consent of department.

325. INTRODUCTION TO THE LINGUISTICS OF AMERICAN SIGN LANGUAGE (3). Analyze the visual language of ASL that has its own grammatical rules to expressively convey information. Overview of phonology, morphology, syntax, and sociolinguistics will be discussed. Taught in American Sign Language. PRQ: FLSL 202 or consent of department.

361. DEAF CULTURE (3). Focus on the history, perspectives in medical, social and cultural-linguistic models, identity, power, folklore, politics, deaf education, Deaf gain, anthropology, and sociology of Deaf culture. Intersectionality within Deaf culture will be also discussed. Taught in American Sign Language. PRQ: FLSL 201 or consent of department.

400. SPECIAL TOPICS IN AMERICAN SIGN LANGUAGE (3). Examination of documentaries, films, video clips, autobiographies, books, and scholarly articles to develop an understanding of the contributions of different Deaf individuals and groups. Topics and issues may differ each course. Topic announced, may be repeated to a maximum of 6 semester hours when topic varies. Taught in American Sign Language. PRQ: FLSL 201 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.

Khmer (FLKH)

103. BEGINNING KHMER I (5). Introduction to modern Khmer language and culture. Developing skills in listening, speaking, reading, and writing.

104. BEGINNING KHMER II (5). Continuation of FLKH 103. PRQ: FLKH 103 or consent of department.

203. INTERMEDIATE KHMER I (3). Continuation of developing skills in listening, speaking, reading, and writing. PRQ: FLKH 104 or consent of department.

204. INTERMEDIATE KHMER II (3). Further developing skills in listening, speaking, reading, and writing. Study of Cambodian culture and civilization through a variety of media. PRQ: FLKH 203 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). Further developing skills in listening, speaking, reading, and writing. Study of Burmese culture and civilization through a variety of media. PRQ: FLBU 203 or consent of department.

FLBU 300. SPECIAL TOPICS IN BURMESE LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

FLBU 400. SPECIAL TOPICS IN BURMESE LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

FLBU 482. CENSORSHIP, PROPAGANDA, AND MEDIA BIAS IN SOUTHEAST ASIA AND BEYOND (3). Addresses the question What is the general media landscape like in Southeast Asia? Issues relevant to freedom of expression and cultural production of dissent are addressed. Topics include literature, cartoons, slogans, authoritarian regimes, and social media. Hands-on learning opportunities provide experience in creating digital narratives and interactive contents.

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). Further developing skills in listening, speaking, reading, and writing. Study of Chinese culture and civilization through a variety of media. PRQ: FLCH 201 or consent of department.

FLCH 300. SPECIAL TOPICS IN CHINESE LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: 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.

FLCH 400. SPECIAL TOPICS IN CHINESE LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

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 (3). Continuation of developing skills in listening, speaking, reading, and writing. PRQ: FLIN 104 or consent of department.

FLIN 204. INTERMEDIATE INDONESIAN II (3). Further developing skills in listening, speaking, reading, and writing. Study of Indonesian culture and civilization through a variety of media. PRQ: FLIN 203 or consent of department.

FLIN 300. SPECIAL TOPICS IN INDONESIAN LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

FLIN 400. SPECIAL TOPICS IN INDONESIAN LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

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). Further developing skills in listening, speaking, reading, and writing. Study of Philippine culture and civilization through a variety of media. PRQ: FLTA 203 or consent of department.

FLTA 300. SPECIAL TOPICS IN TAGALOG LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

FLTA 400. SPECIAL TOPICS IN TAGALOG LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: 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 (3). 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 or consent of department.

FLTH 204. INTERMEDIATE THAI II (3). Further developing skills in listening, speaking, reading, and writing. Study of Thai culture and civilization through a variety of media. PRQ: FLTH 203 or consent of department.

FLTH 300. SPECIAL TOPICS IN THAI LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

FLTH 400. SPECIAL TOPICS IN THAI LANGUAGE, LITERATURE, LINGUISTICS OR CULTURE (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

General

FLAL 300. INTRODUCTION TO WORLD LANGUAGES AND CULTURES (1). A general introduction to the study of language and culture and includes an overview of world languages, literatures, and cultures and their manifestation in our society including the study of language diversity and the personal, social and political effects of language diversity. In addition, students will learn how to use library resources for general academic research.

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 WORLD LANGUAGES AND CULTURES (3). Credit awarded upon completion of an internship experience and writing assignments related to student's field of study. Open to declared majors and minors in the Department of Foreign Languages and Literatures. 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 421. SENIOR CAPSTONE IN TRANSLATION (3). Intensive study of a selected topic in translation under the supervision of a faculty mentor according to the student's area of interest and language pair. Possible specializations include literary, technical, commercial, legal, medical, or translation for new media. Prior to enrolling in the class, students must find a faculty member who will agree to supervise the project. Students are to meet with the faculty member on a regular basis. Credit will be awarded upon completion of the assignments related to translation. Open to declared foreign language majors in French, German, or Spanish and minors in Translation for Global Literacy. PRQ: Senior standing and consent of department.

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 SCHOOL EXPERIENCE IN FOREIGN LANGUAGES (1). Discipline-based clinical experience for students seeking licensure in French, German, or Spanish. Includes observation, evaluation, methods, and practicum. 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. FOREIGN LANGUAGE TEACHING METHODS FOR THE ELEMENTARY AND MIDDLE SCHOOLS (3). Development of an effective foreign language program at the elementary and middle 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. FOREIGN LANGUAGE TEACHING METHODS FOR 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 IN FOREIGN LANGUAGES (6-12). 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.

World Languages and Cultures Faculty

John R. Bentley, Ph.D., University of Hawai'i, professor, chair
 Shannon Becker, Ph.D., Purdue University, assistant professor
 Dennis E. Brain, Ph.D., University of Texas, associate professor
 Jessamine Cooke-Plagwitz, Ph.D., Queen's University, Kingston, Ontario, associate professor
 Mandy Faretta-Stutenberg, Ph.D., University of Illinois at Chicago, assistant professor
 Frances Jaeger, Ph.D., University of Illinois, associate professor
 Joanna Kot, Ph.D., University of Chicago, professor
 Karen Lichtman, Ph.D., University of Illinois at Urbana-Champaign, associate professor
 Linda K. Saborio, Ph.D., University of North Carolina, Chapel Hill, associate professor
 Matthew B. Smith, Ph.D., University of California, Berkeley, assistant professor
 Francisco Solares-Larrave, Ph.D., University of Illinois, associate professor
 Tharaphi Than, Ph.D., University of London, associate professor
 Kanjana H. Thepboriruk, Ph.D., University of Hawai'i, assistant professor
 Stephen Vilaseca, Ph.D., University of Minnesota, Twin Cities, associate professor

College of Visual and Performing Arts

Paul Kassel, M.F.A., dean
Janet Hathaway, Ph.D., 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.).

School Names and Undergraduate Programs Offered

School of Art and Design

B.A. or B.S. in art
 B.A. in art history
 B.F.A. in art studio and design
 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 dance performance
 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 B.A. degree requires demonstrated competence in a foreign language. (Attention is directed to the section of the catalog entitled "Other Graduation Requirements" and the heading "Foreign Language Requirement for the B.A. degree.")

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 Bachelor of Arts 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, scientific illustration, and arts management.

Dean's 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.

Interdisciplinary Courses (IVPA)

201. CREATING ART FOR OTHERS (3). Application of foundational skills and tools of music, theatre, dance, and/or visual art. Advancement of artistic growth and the development of process through studio practice. Application of skills and processes to a solicited commission, identification of a community and fulfilment of a need of that community through an artistic project. The project will be assessed by the students via various methods, data gathered and analyzed for the project's impact.

400. ART LINK (3). Interdisciplinary arts course that introduces students to socially engaged arts practices in community-based settings or civic organizations. Student collaborative teams will design and implement arts projects in consultation with community partners.

School of Art and Design (ART, ART-)

Admission to the areas of study in art studio and design and visual communication under the B.F.A. in art studio and design is limited. See "Limited Admissions and Limited Retention Requirements" in the Admission section of this catalog.

Requirements for All Majors

Admission into the major in Art and Design Education (B.S.Ed.) or in the Art Studio and Design specializations (B.F.A.) includes a portfolio review as indicated. No portfolio review is required for the major in Art (B.A. or B.S.) or Art History (B.A.). Check departmental information for any additional requirements.

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 art studio classes in one semester.

Transfer applicants for all emphases of the B.F.A. degree in art studio and design (Design and Media Arts, Art Studio) must pass a portfolio review. Contact the School of Art and Design as early as possible for information.

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 (84)

- *ART 100 - Drawing Foundation I (3)
- *ART 102 - 2-D Foundation (3)
- *ART 103 - 3-D Foundation (3)
- ARTD 201 - Introduction to Visual Communication (3)
- ARTS 200 - Beginning Life Drawing (3)
- ARTS 300 - Intermediate 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 - Art and Technology in the K-12 Classroom (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)

15 semester hours in the following four categories with no repetition of courses:

1. One of the following pairs of courses (6)
ARTS 310 - Issues in Contemporary Drawing (3), and ARTS 400 - Advanced Drawing I (3)
ARTS 321 - Waterbased Painting I (3), and ARTS 324 - Painting II (3)
ARTS 323 - Painting I (3), and ARTS 324 - Painting II (3)
ARTS 327 - Illustration I (3), and ARTS 437 - Intermediate Illustration (3)
ARTS 330 - Introduction to Printmaking (3), and ARTS 331 - Intermediate Printmaking: Lithography (3)
ARTS 330 - Introduction to Printmaking (3), and ARTS 332 - Intermediate Printmaking: Intaglio and Relief (3)
ARTS 330 - Introduction to Printmaking (3), and ARTS 333 - Intermediate Printmaking: Serigraphy (3)
ARTS 341 - Beginning Ceramics (3), and ARTS 346A - Intermediate Hand-Building Ceramics (3)
ARTS 341 - Beginning Ceramics (3), and ARTS 346 - Intermediate Ceramics (3)
ARTS 351 - Beginning Metalwork, Jewelry Design, and Digital Fabrication (3), and ARTS 352 - Intermediate Metalwork, Jewelry Design, and Digital Fabrication (3)
ARTS 361 - Beginning Sculpture I (3), and ARTS 362 - Intermediate Sculpture II (3)
ARTD 313 - Beginning Photography (3), and ARTD 413 - Intermediate Traditional Photography (3)
2. One of the following (3)
ARTS 341 - Beginning Ceramics (3)
ARTS 351 - Beginning Metalwork, Jewelry Design, and Digital Fabrication (3)
ARTS 361 - Beginning Sculpture I (3)
3. One of the following (3)
ARTS 310 - Issues in Contemporary Drawing (3)
ARTS 321 - Waterbased Painting I (3)
ARTS 323 - Painting I (3)
ARTS 327 - Illustration I (3)
ARTS 330 - Introduction to Printmaking (3)
ARTD 313 - Beginning Photography (3)
4. One of the following (3)
ARTD 303 - Video Art (3)
ARTD 370 - 2-D Animation (3)

Requirements outside School (12)

Depending on the courses selected, the multicultural requirement may also be applied toward general education requirements.

- **EPFE 201 - Education as an Agent for Change (3),
- ^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)
- LTIC 420 - Methods and Materials for Teaching English Language Learners in the Content Areas (3)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

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.

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 entitlement for educator licensure in the state of Illinois. 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.

Students must present an art education entrance portfolio consisting of studio work and appropriate art education materials to the art education faculty at the end of the semester in which they are enrolled in ARTE 200 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.

The criminal background check is required for licensure (prior to ARTE 342) for each clinical experience course, as well as, student teaching site as laid out per each site's rules and regulations. Students must 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.

Candidates who successfully complete the program and pass the state mandated Teacher Performance Assessment will have completed all required ISBE and CAEP standards for receiving university recommendation for licensure. Successful completion of the program without receipt of a passing score on the state mandated Teacher Performance Assessment may result in the candidate receiving a degree without university recommendation for licensure.

Total Hours for a Major in Art Education: 96

Major in Art History (B.A.)

Art history is an interdisciplinary practice focused on visual and material culture and emphasizing critical reading, research, and writing skills in order to promote the understanding of regions both familiar and other than our own. The major is for students interested in visual art as an aspect of history and culture. The curriculum provides preparation for graduate study or for work in museums, galleries, auction houses, and archives.

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 - Introduction to 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)

Other Requirements (12-24)

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.)

Courses in related fields, including anthropology, art, history, literature, or philosophy, selected in consultation with a major adviser (12)

Total Hours for a Major in Art History: 48-60

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. or B.S.)

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 Bachelor of Science (B.S.) 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 including the sciences, mathematics, and/or a technology field.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Course Selection

Students with a major in art (B.A. or B.S.) should use the offerings of the school and the college, as well as the offerings of the other colleges in the university, in designing suitable programs of study that will reinforce their intellectual and professional goals. The School of Art and Design's advising staff are available to students in need of advice and assistance.

Requirements in School (48)

*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)

ART 499 - Capstone Seminar (3)

Other art courses (24)

Requirements outside School (0-12)

For the B.A. degree

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.)

* Available for general education credit.

^ This is a Writing Infused Course.

For the B.S. degree

Two advisor-approved courses in Science, Mathematics, and/or Technology taken in addition to General Education requirements (6-8).

Total Hours for a Major in Art (B.A. or B.S.): 48-60

Major in Art Studio and Design (B.F.A.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

A portfolio review is required for admission into the major in art studio and design (B.F.A.) after completion of designated courses in the chosen field of study. Check departmental information for any additional requirements.

Emphasis 1. Design and Media Arts

Requirements in School (78)

*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)
 300/400-level art history electives (6)

One of the following areas of study (54)

Time Arts (54)

ARTD 273 - Introduction to Time Arts I (3)
 ARTD 303 - Video Art (3)
 ARTD 313 - Beginning Photography (3)
 ARTD 350 - Sound (3)
 ARTD 370 - 2-D Animation (3)
 ARTD 373 - 3-D Animation (3)
 ARTD 409 - Advanced Topics: Interactive Art (3)
 ARTD 466 - Intermedia Arts (3)
 ARTD 467 - Advanced Topics: Video Art (3)
 ARTD 473 - Advanced Topics: 3D Animation (3)
 ARTD 406 - Senior Project (3)
 ARTD 475 - Time Arts: Special Topics (3)
 Upper-division art studio electives (18)

Special requirements: Students must present an entrance portfolio to the time arts faculty before completion of ARTD 273 and pass the portfolio review for admission into the time arts area of study.

Photography (54)

ARTD 202 - Introduction to Typography (3)
 ARTD 303 - Video Art (3)
 ARTD 313 - Beginning Photography (3)
 ARTD 318 - Interaction Design I (3)
 ARTD 413 - Intermediate Traditional Photography (3)
 ARTD 419 - Intermediate Digital Photography (3)
 ARTD 460 - Experimental and Alternative Photography (3)
 ARTD 464 - Advanced Photography: Post Production (3)
 ARTD 465 - Sequencing and Photobooks (3)
 ARTD 469 - Advanced Photographic Projects and Research (6)
 ARTD 470 - Photographic Lighting (3)
 ARTD 406 - Senior Project (3)
 ARTS 330 - Introduction to Printmaking (3)
 Upper-division art studio electives (12)

Special requirements: Students must present an entrance portfolio to the photography faculty before completion of their second course in photography after completing ARTD 313 and one of the following ARTD 419 or ARTD 413 and pass the portfolio review for admission into the photography area of study.

Visual Communication (54)

ARTD 201 - Introduction to Visual Communication (3)
 ARTD 202 - Introduction to Typography (3)
 ARTD 211 - Intermediate Typography (3)
 ARTD 212 - Image in Visual Communication (3)
 ARTD 311 - Intermediate Visual Communication I (3)
 ARTD 312 - Intermediate Visual Communication II (3)
 ARTD 313 - Beginning Photography (3)
 ARTD 318 - Interaction Design I (3)
 ARTD 319 - Interaction Design II (3)
 ARTD 401 - User Experience Design (3)
 ARTD 405 - Professional Practices in Design (3)
 ARTD 411 - Advanced Visual Communication I (3)
 ARTD 412 - Advanced Typography (3)
 ARTD 406 - Senior Project (3)
 ARTD or ARTS Studio Electives (12)

Special requirements: Students must successfully complete a review of their senior project during ARTD 406.

Students must present an entrance portfolio, be interviewed by the visual communication faculty and pass the portfolio review for admission into the visual communication area of study before registering for ARTD 201, a course offered only in fall semester. Students must have a minimum GPA of 3.00 in the following courses to continue in the visual communication program:

ARTD 201 - Introduction to Visual Communication (3)
 ARTD 202 - Introduction to Typography (3)
 ARTD 211 - Intermediate Typography (3)
 ARTD 212 - Image in Visual Communication (3)

Total Hours for Emphasis 1, Design and Media Arts: 78

Emphasis 2. Art Studio

Special requirements: To enter the art studio emphasis of the major in art studio and design (B.F.A.), students must successfully complete 9 semester hours of basic requirements, ARTH 282 and ARTH 292, at least 12 of the 24 required semester hours of ARTS 200/300-level Core Art Studio Requirements, and pass a portfolio review. These special requirements must be met no later than the semester in which the entrance portfolio is submitted. All eight courses (24 semester hours) listed in the Core Art Studio Requirements must be completed in conjunction with the art studio emphasis B.F.A. degree.

Requirements in School (78)

Basic Requirements (9)

*ART 100 - Drawing Foundation I (3)
 *ART 102 - 2-D Foundation (3)
 *ART 103 - 3-D Foundation (3)
 Art History Requirements (12)
 *ARTH 282 - Introduction to World Art (3)
 *ARTH 292 - Art and Design Since 1900 (3)
 300/400 level art history electives (6)

Core Art Studio Requirements (24)

ARTS 200 - Beginning Life Drawing (3)
 ARTS 321 - Waterbased Painting (3),
 OR ARTS 323 - Painting I (3)
 ARTS 327 - Beginning Illustration (3)
 ARTS 330 - Introduction to Printmaking (3)
 ARTS 341 - Beginning Ceramics (3)
 ARTS 351 - Beginning Metalwork, Jewelry Design, and Digital Fabrication (3)
 ARTS 361 - Beginning Sculpture I (3)
 ARTS 368 - Introduction to Fiber: Papermaking (3),
 OR ARTS 371 - 2D/3D Woven Construction (3),
 OR ARTS 372 - Introduction to Fiber: Print Dye Paint Stitch (3),
 OR ARTS 374 - Installation and Fiber Sculpture (3)

* Available for general education credit.

¹ Students wishing to portfolio into the Drawing Area must choose ARTS 300 instead of ARTS 200; students wishing to portfolio into all other areas must choose ARTS 200.

B.F.A. Art Studio Area Requirements (33)

Students must successfully complete the sub-plan requirements in one of the following fields: ceramics, drawing, fiber, illustration, metals, painting, printmaking, or sculpture. Check individual area sub-plans for specific requirements. Exceptions to any individual area sub-plan will require faculty approval.

Drawing Area Sub-Plan (33)

ARTS 200 - Beginning Life Drawing (3)
 ARTS 300 - Intermediate Drawing (3)
 ARTS 310 - Issues in Contemporary Drawing (3)
 ARTS 400 - Advanced Drawing (3)
 ARTS 402 - Advanced 2-D Figure Study (3)
 ARTS 403 - Drawing Workshop (3)
 ARTS 405 - Interdisciplinary Seminar (3)
 ARTS 406 - Senior Project (3)
 ARTS/ARTD 300/400-level electives (9)²

Illustration Area Sub-Plan (33)

ARTD 201 - Introduction to Visual Communication (3)
 ARTD 370 - 2-D Animation (3)
 ARTS 402 - Advanced 2-D Figure Study (3),
 OR ARTS 324 Painting II: The Figure (3)
 ARTS 406 - Senior Project (3)
 ARTS 437 - Intermediate Illustration (6)
 ARTS 438 - Advanced Illustration (6)
 ARTS 447 - Computer Raster Applications for Illustration (3)
 ARTS 448 - Computer Vector Applications for Illustration (3)
 ARTS/ARTD 300/400-level electives (3)²

Painting Area Sub-Plan (33)

ARTD 313 - Beginning Photography (3)
 ARTS 322 - Painting Methods and Materials (3)
 ARTS 324 - Painting II - The Figure (3)
 ARTS 405 - Interdisciplinary Seminar (3)
 ARTS 406 - Senior Project (3)
 ARTS 421 - Advanced Painting (9)
 ARTS 425 - Special Topics in Painting (3)
 ARTS/ARTD 300/400-level electives (9)²

Printmaking Area Sub-Plan (33)

ARTD 313 - Beginning Photography (3)
 ARTS 331 - Intermediate Printmaking: Lithography (3)
 ARTS 332 - Intermediate Printmaking: Intaglio and Relief (3)
 ARTS 333 - Intermediate Printmaking: Serigraphy (3)
 ARTS 405 - Interdisciplinary Seminar (3)
 ARTS 406 - Senior Project (3)
 ARTS 430 - Advanced Printmaking Workshop (6)
 ARTS/ARTD 300/400 electives (9)²

Ceramics Area Sub-Plan (33)

ARTS 346 - Intermediate Ceramics (12)
 ARTS 405 - Interdisciplinary Seminar (3)
 ARTS 406 - Senior Project (3)
 ARTS 446 - Advanced Ceramics (12)
 ARTS/ARTD 300/400-level electives (3)²

Fiber Area Sub-Plan (33)

ARTS 405 - Interdisciplinary Seminar (3)
 ARTS 406 - Senior Project (3)
 ARTS 470 - Advanced Fiber Workshop (6)
 ARTS 471 - Special Topics in Fiber (3)
 Three of the following (9)
 ARTS 368¹ - Introduction to Fiber: Papermaking (3)
 ARTS 371¹ - 2D/3D Woven Construction (3)
 ARTS 372¹ - Print, Dye, Paint, Stitch (3)
 ARTS 374¹ - Introduction to Fiber: Installation and Fiber Sculpture (3)
 ARTS/ARTD 300/400-level electives (9)²

Metalwork, Jewelry Design, and Digital Fabrication Area Sub-Plan (33)

ARTS 352 - Intermediate Metalwork, Jewelry Design, and Digital Fabrication (3)
 ARTS 405 - Interdisciplinary Seminar (3)
 ARTS 406 - Senior Project (3)
 ARTS 451 - Advanced Metalwork, Jewelry Design, and Digital Fabrication (12)
 ARTS 452 - Advanced Research in Metalwork, Jewelry Design, and Digital Fabrication (3)
 ARTS/ARTD 300/400-level electives (9)²

Sculpture Area Sub-Plan (33)

ARTS 362 - Intermediate Sculpture (6)
 ARTS 405 - Interdisciplinary Seminar (3)
 ARTS 406 - Senior Project (3)
 ARTS 456 - Sculpture Workshop (3)
 ARTS 461 - Advanced Sculpture (9)
 ARTS/ARTD 300/400-level electives (9)²

Total Hours for Emphasis 2, Studio: 78

Accelerated B.A./J.D. Program in Art History and the College of Law**Admission**

The six-year integrated sequence leads to both the B.A. in Art History and J.D. degrees. Students who wish to complete this program must identify themselves to the Art History Division as majors who wish to complete the accelerated program. All undergraduates who major in art history and have completed at least 90 semester hours of undergraduate course work with a minimum GPA of 3.25 are eligible to apply to NIU's College of Law under the special provisions of this program. As part of the application to the College of Law, applicants must take the LSAT and receive a score at or above the 50th percentile of the previous year's matriculating law class. Applicants are advised to take the LSAT and submit their application to the College of Law no later than February of their junior year. Admission will be on a competitive basis, and the likelihood of admission will depend on the number and quality of applicants to the program, the number and quality of applicants to the College of Law in general, as well as other factors normally considered in admissions decisions by the College of Law.

Curriculum

Students must complete all the requirements for the Art History B.A. degree 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.

Minor in Art (21)

Declaration of this minor by students majoring in art and design education (B.S.Ed.) or art studio and design (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)

* Available for general education credit.

¹ ARTS 368, ARTS 371, ARTS 372, and ARTS 374 may not be repeated in the fiber area sub-plan if taken to fulfill Core Art Studio Requirements.

² Additional studio electives required beyond 24 credits listed in Core Art Studio and Sub-Plan requirements.

Minor in Art History (18)

The minor in art history is for all students interested in how we communicate through images and the built environment. Course work focus is on ways that human relationships to images, forms, and structures have changed over time and differ from one geographical and cultural context to another.

Declaration of this minor by students majoring in art (B.A. or B.S.), art and design education (B.S.Ed.), or art studio and design (B.F.A.) is permitted.

All art history courses at the 200-300 level are available for general education credit and may be used to fulfill both general education requirements (including pathways) and the art history minor.

Check departmental information for any additional requirements.

Requirements (18)

Six or more semester hours in the minor must be taken at NIU.

Nine or more semester hours must be at the 300-400 level.

*ARTH 282 - Introduction to World Art (3)

*ARTH 292 - Art and Design Since 1900 (3)

Electives in art history (12)

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 6 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.

101. DRAWING FOUNDATION II (3). Further exploration of basic drawing media. Development of skill in representation and interpretation of subjects.

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.

103. 3-D FOUNDATION (3). Intensive study of form and structure in three-dimensional space. Studio and lecture.

104. COMPUTER ART FOUNDATION (3). Introduction to methods and concepts of computer art. Primary focus will be on the unique traits of art created through the use of a computer.

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 (1-6). Concentrated study with professional artists and/or art educators. Offered irregularly. Studio, lecture, and discussion, and/or field trip. May be repeated to a maximum of 9 semester hours.

490. INDEPENDENT RESEARCH (1-9). Work on individual problems in the student's major field. May be repeated to a maximum of 9 semester hours. PRQ: Consent of school.

499. CAPSTONE SEMINAR (3). Capstone seminar for students in the B.A. in Art program. Lecture, discussion and/or field experience. S/U grading.

Design and Media Arts (ARTD)

201. INTRODUCTION TO VISUAL COMMUNICATION (3). Introduces composition, typography, design methodology and historical and contemporary concepts about the evolving field of graphic design. Offered only in Fall semester. Visual Communication majors, please see "Visual Communication Area of Study" in the Limited Admissions Requirements section of this catalog regarding admittance to the Visual Communication program. PRQ: For majors of visual communication: ART 100, ART 102, consent of school, and admission to the visual communication area of study. For non-majors: ART 100, ART 102, and consent of school.

202. INTRODUCTION TO TYPOGRAPHY (3). Introduction to the physical and conceptual aspects of typography as a visual medium. Historical, technical, formal and abstract compositional requirements of typography, integrating hand and computer skills to render type. PRQ: ART 100 and ART 102.

211. INTERMEDIATE TYPOGRAPHY (3). Study of typography, including its form, application, and role in culture. Exploration of typography as a primary medium of visual communication. PRQ: ARTD 201 and ARTD 202.

212. IMAGE IN VISUAL COMMUNICATION (3). Study of the use, meaning, and making of images in graphic design. Technical aspects of image development and manipulation. Various methods and techniques of image making will be studied and explored. PRQ: ARTD 201 and ARTD 202.

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 (3). 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 (3).** 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 (3).** Color theory: Munsell, Ostwald, Itten, Albers. Combination of lecture and studio aimed at developing sensitivity to color and knowledge of its properties. PRQ: ART 102.

303. **VIDEO ART (3).** Concepts and techniques of video art. PRQ: Successful completion of portfolio review in any area in the School of Art, or consent of school.

311. **INTERMEDIATE VISUAL COMMUNICATION I (3).** Use of typography and imagery in the problem-solving processes in graphic design with emphasis on the development of conceptual skills. PRQ: ARTD 211 and ARTD 212.

312. **INTERMEDIATE VISUAL COMMUNICATION II (3).** Further work in graphic design with a focus on sequence and series in communication media. PRQ: ARTD 311 and ARTD 318.

313. **BEGINNING PHOTOGRAPHY (3).** Introduction to concepts and techniques of digital photography. Students must have a DSLR camera with manual functions.

318. **INTERACTION DESIGN I (3).** Introduction to aspects of interaction design including usability, information architecture, graphic design in the interactive context, and the technical parameters of an interactive environment. PRQ: ARTD 201 or ARTD 202.

319. **INTERACTION DESIGN II (3).** Principles of prototyping, digital animation, and interaction, and the application of formal systems in design. PRQ: ARTD 318.

320. **MOTION GRAPHIC DESIGN (3).** Introduction to aspects of motion graphic design; history, aesthetic issues, and technical parameters of motion graphic development.

350. **SOUND (3).** 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 (3).** 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 (3).** 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 (3).** Concepts and practices of 3-D modeling and animation. PRQ: ARTD 370, successful completion of portfolio review, or consent of school.

401. **USER EXPERIENCE DESIGN (3).** Principles of user experience in the interaction design context and beyond. Focus on developing user centered solutions, research, content strategy, testing and analytics. PRQ: ARTD 319.

404. **DESIGN METHODOLOGIES (3).** Investigation and utilization of problem-solving strategies for the designer. PRQ: ARTD 311.

405. **PROFESSIONAL PRACTICES IN DESIGN (3).** Investigation of business, legal, and ethical aspects of professional practice for designers. Effective communication concerns in client relationships and contract documents. Fundamental considerations within office practice; the designer's role and responsibilities. PRQ: ARTD 212 or successful completion of review in the Design and Media Arts division, or consent of school.

406. **SENIOR PROJECT (3).** 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 (3).** 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 (3).** 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 TYPOGRAPHY (3).** Typography in communication systems design, aspects of type in branding design, and further refinement of typographic application in communication design, including interaction design. PRQ: ART 411.

413. **INTERMEDIATE TRADITIONAL PHOTOGRAPHY (3).** Further exploration of the technical and aesthetic aspects of photography as a contemporary art medium. Studio, lecture, and laboratory. May be repeated to a maximum of 12 semester hours. PRQ: ARTD 313.

414. **INFORMATION DESIGN (3).** 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 (3).** 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 (3).** 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 (3).** 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 (1-6).**

A. Time Arts

C. Visual Communication

D. Photography

Cooperative work experience for students in the design and technology emphasis. Cooperatively supervised professional practice with selected and/or approved design firms to provide a learning experience complementary to the student's area of study in design. May be repeated to a maximum of 6 semester hours. S/U grading. PRQ: Advanced standing in the design student's area of study and approval of the faculty field experience adviser in the design student's area of study.

460. **EXPERIMENTAL AND ALTERNATIVE PHOTOGRAPHY (3).** Further exploration of the technical and aesthetic aspects of photography as a contemporary art medium with emphasis on experimental and alternative techniques. Studio, lecture, and laboratory. PRQ: ARTD 413 or ARTD 419; and successful completion of portfolio review in photography.

464. **ADVANCED PHOTOGRAPHY: POST-PRODUCTION (3).** Further exploration of the technical and aesthetic aspects of photography as a contemporary art medium with emphasis on advanced photographic post-production and printing. Studio, lecture, and laboratory. PRQ: ARTD 413 or ARTD 419; and successful completion of portfolio review in photography.

465. **SEQUENCING AND PHOTOBOKS (3).** Further exploration of the technical and aesthetic aspects of photography as a contemporary art medium with emphasis on sequencing and photobooks. Studio, lecture, and laboratory. PRQ: ARTD 413 or ARTD 419; and successful completion of portfolio review in photography.

466. **INTERMEDIA ARTS (3).** Studies in art combining (mostly electronic) media, with emphasis on individual projects. Topics announced. May be repeated to a maximum of 12 semester hours. PRQ: Successful completion of portfolio review, or consent of school.

467. **ADVANCED TOPICS: VIDEO ART (3).** 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 (3).** Advanced projects in photographic media. Topics announced. May be repeated for credit. PRQ: ARTD 413 or ART 419 and successful completion of portfolio review in Photography.

469. **ADVANCED PHOTOGRAPHIC PROJECTS AND RESEARCH (3).** Advanced individual work in photography with emphasis on experimentation, artistic expression, and independent research. May be repeated to a maximum of 12 semester hours. PRQ: ARTD 413 or ARTD 419 and successful completion of portfolio review in Photography.

470. **PHOTOGRAPHIC LIGHTING (3).** Further exploration of the technical and aesthetic aspects of photography as a contemporary art medium with emphasis on photographic lighting techniques. Studio, lecture, and laboratory. PRQ: ARTD 413 or ARTD 419; and successful completion of portfolio review in photography.

473. **ADVANCED TOPICS: 3D ANIMATION (3).** 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 (3).** Concentrated study in time arts and electronic media. Topics announced. May be repeated to a maximum of 12 semester hours.

Art and Design 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.

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; ART 100 and ART 101 and ART 102 and ART 103 and ARTH 292; and minimum 2.75 cumulative GPA and admission to educator licensure, or consent of school.

343. **ART AND TECHNOLOGY IN THE K-12 CLASSROOM (3).** Focuses on the integration of emerging technologies into art and design education. The teaching of digital technologies appropriate for K-12 classroom settings will be highlighted. Includes hands-on experience with creating expressive art in a variety of digital media. Strategies for integrating art and technology practice into K-12 art curriculum will also be explored. CRQ: ARTE 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.

384. **HISTORY AND PHILOSOPHY OF ART EDUCATION (3).** Survey and appraisal of the historical and philosophical bases for the teaching of art. Emphasis placed on transformations of the field related to changing cultural contexts and conceptions of culture. Basic methods and conceptual issues underlying historical methodologies.

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) and successful completion of the Test for Academic Proficiency or equivalent. 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) and successful completion of the Test for Academic Proficiency or equivalent. 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. Online sections also offered.

292. ART AND DESIGN SINCE 1900 (3) Modern and contemporary art and design. Online sections also offered.

294. INTRODUCTION TO ARTS OF ASIA (3). Exploration of philosophical, religious, imperial and secular cultural developments in the traditional arts of South, Southeast, and East 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.

331. ART, NATURE AND TECHNOLOGY 1400 TO 1800 (3). Examination of mathematical and scientific principles used by artist-scientists to create art and architecture from 1400 to 1800. Exploration of the ancient roots of these principles and their continuing currency in artist-scientists' achievements today.

340. STUDIES IN MODERN AND AMERICAN ART (3).

- A. 19th Century Art
- B. 20th Century Modernism
- C. Thematic Subjects

History, theory, and criticism of various aspects of 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.

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
- C. From Craft to Industry
- D. 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.

361. HISTORY OF SUSTAINABLE DESIGN (3). History, theory, and criticism of sustainable design from the 18th century to the present.

362. HISTORY OF VISUAL COMMUNICATION (3). Global history, theory, and criticism of visual communication in print culture and new media surveyed from among diverse cultural contexts around the world.

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 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 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 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 MODERN ART (3). Various topics, such as Global Moderns, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

455. TOPICS IN CONTEMPORARY ART (3). Various topics, such as Photography as Art and Art as Photography, Globalization and Contemporary Art, Identity in Contemporary Art, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

456. TOPICS IN 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 ASIAN ART (3). Specialized topics selected for in-depth study of media, imagery, artistic traditions or genres in Asian Art will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

458. TOPICS IN 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.

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 semester hours. PRQ: ART 100 or consent of school.

215. FUNDAMENTALS OF GRAPHIC DESIGN (3). 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 102.

261. 3-D MATERIALS AND TECHNIQUES (3). Introduction to materials and techniques of three-dimensional media and technical introduction to a variety of materials and processes including woodworking and welding. Studio and lecture. PRQ: ART 103.

300. INTERMEDIATE DRAWING (3). Opportunity to develop interpretive and representational skills through work in a variety of drawing media. Students wishing to portfolio into the B.F.A. studio program, drawing area of study must take this class prior to portfolio review. PRQ: ART 100 or consent of school.

310. ISSUES IN CONTEMPORARY DRAWING (3). 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 6 semester hours. PRQ: ART 100 or consent of school.

321. WATERBASED PAINTING (3). Painting in various water-soluble media.

322. PAINTING METHODS AND MATERIALS (3). Exploration of painting methods and materials.

323. PAINTING I (3). Development of the student's ability in painting with emphasis on ideas and materials.

324. PAINTING II: THE FIGURE (3). Traditional and contemporary figure study in various painting media. PRQ: ARTS 321 or ARTS 323.

327. BEGINNING ILLUSTRATION (3). Introduction to black and white illustration with emphasis on techniques and approaches for developing representational and observational drawing skills and how they relate to the methods and subject matter of illustration. CRQ: ARTS 200. PRQ: ART 100 and ART 102.

330. INTRODUCTION TO PRINTMAKING (3). Overview and introduction to basic principles and fine art studio applications of the primary printmaking media – intaglio, relief, lithography, and serigraphy. Idea and imagery development and print history.

331. INTERMEDIATE PRINTMAKING: LITHOGRAPHY (3). Comprehensive study of planographic printing from stone, aluminum, and photographic plates with an introduction to color printing. Discussion and studio work in various phases of the process with emphasis on concept development. Course may be repeated to a maximum of 9 semester hours. PRQ: ARTS 330.

332. **INTERMEDIATE PRINTMAKING: INTAGLIO AND RELIEF (3).** Comprehensive study of intaglio and relief printing processes with a focus on color printing methods. Discussion and studio work in various phases of the process with emphasis on concept development. Course may be repeated to a maximum of 9 semester hours. PRQ: ARTS 330.

333. **INTERMEDIATE PRINTMAKING: SERIGRAPHY (3).** Comprehensive study of the serigraphy (screenprinting) medium, printing in multiple colors. Various hand-created and photographic stencil techniques. Discussion and studio work in various phases of the process with emphasis on concept development. Course may be repeated to a maximum of 9 semester hours.

338. **ANATOMICAL DRAWING (3).** Sketches and finished drawings executed from cadavers. Research through pictorial resources required regarding muscle origins and insertions, organs, and the internal skeletal structure.

339. **BEGINNING SCIENTIFIC ILLUSTRATION (3).** Introduction to basic scientific representational drawing with emphasis on the biological sciences.

340. **INTERMEDIATE SCIENTIFIC ILLUSTRATION (3).** Continuation of ARTS 339 with introduction to painting techniques with emphasis on zoological science. PRQ: ARTS 339.

341. **BEGINNING CERAMICS (3).** Introduction to ceramics using basic hand-building and wheel-throwing techniques for the exploration of form, texture, and glaze applications. Studio and lecture.

346. **INTERMEDIATE CERAMICS (3 OR 6).** Exploration of form and texture through individually assigned problems using hand-building or wheel-throwing techniques. Laboratory experience in clay and glaze application, studio clay mixing, and kiln firing. Studio and lecture. May be repeated to a maximum of 12 semester hours. PRQ: ARTS 341.

351. **BEGINNING METALWORK, JEWELRY DESIGN, AND DIGITAL FABRICATION (3).** Introduction to jewelry with emphasis on basic fabrication techniques. Studio and lecture.

352. **INTERMEDIATE METALWORK, JEWELRY DESIGN, AND DIGITAL FABRICATION (3).** Introduction to basic forging, and raising, casting, and electroforming and other techniques as they are applicable to the contemporary field of metalwork and jewelry. PRQ: ARTS 351 or consent of school.

361. **BEGINNING SCULPTURE I (3).** Exploration of theory, context, and methods of object making. Technique covered as appropriate to an assignment or a student's work. Studio, lecture, and readings.

362. **INTERMEDIATE SCULPTURE (3).** Continuation of and progression from ARTS 361. Studio, lecture, and readings. May be repeated to a maximum of 9 semester hours. PRQ: ARTS 361.

368. **INTRODUCTION TO FIBER: PAPERMAKING (3).** Exploration of papermaking technique including sheet forming (Western and Eastern traditions), embossing, embedding, lamination, watermarking, and casting. Discussion of various fibers suitable for making paper. Studio, lecture, readings, and discussion of the meaning/context of materials.

371. **2-D/3-D WOVEN CONSTRUCTION (3).** 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 (3).** Exploration of techniques to alter, transform, and manipulate the two-dimensional surface of fabric. Emphasis on cloth as an expressive medium. Dyeing, resists, printing, surface embellishment, stitching, devore, and cloque. Studio, lecture, readings, and discussion of the meaning/context of cloth.

374. **INSTALLATION AND FIBER SCULPTURE (3)** 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 (3).** Intensive studio work in perceptual and conceptual problems using a variety of media. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 300 or consent of school.

402. **ADVANCED 2-D FIGURE STUDY (3).** 2-D studio work emphasizing the expressive use of the figurative motif. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 200 or consent of school.

403. **DRAWING WORKSHOP (3).** Advanced studio work in expressive drawing processes involving use of form, content, and technique. Emphasis on selected directions. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 300 or consent of school.

405. **INTERDISCIPLINARY SEMINAR (3).** Lecture/discussion to develop skills related to studio practice and portfolio development for undergraduate students in their senior year. Includes critiques, artist presentations, portfolio documentation, personal thesis statements, critical writing, and selected readings. PRQ: Senior standing and pass portfolio review in B.F.A. studio program.

406. **SENIOR PROJECT (3).** 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 (3 or 6).** Individually selected studio problems in painting. May be taken concurrently with one other section of ARTS 421. May be repeated. PRQ: ARTS 322 or ARTS 324.

423. **SELECTED PROBLEMS IN STUDIO ART (3).** Emphasis on specific concepts and/or processes within the drawing, painting, and printmaking curriculum. May be repeated to a maximum of 6 semester hours. PRQ: ART 100 and consent of school.

425. **SPECIAL TOPICS IN PAINTING (3).** Concentrated study in contemporary painting issues and practice. May be repeated to a maximum of 9 semester hours with consent of school.

430. **ADVANCED PRINTMAKING WORKSHOP (3 or 6).** Emphasis on developing individual skills and a body of work utilizing the medium. May be repeated. PRQ: ARTS 331 or ARTS 332 or ARTS 333.

436. **SPECIAL TOPICS IN ILLUSTRATION (3).** Emphasis on contemporary topics of illustration theory, using current illustration materials, equipment, and techniques. Topics announced. May be repeated.

437. **INTERMEDIATE ILLUSTRATION (3).** 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 6 semester hours. PRQ: ARTS 327 and successful completion of portfolio review in Illustration.

438. **ADVANCED ILLUSTRATION (3).** 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 taken for 6 semester hours with consent of school. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 437.

439. **ADVANCED SCIENTIFIC ILLUSTRATION I (3).** Further exploration of the technical and aesthetic aspects of scientific illustration. Students work in laboratories of NIU scientists, illustrating research being performed. PRQ: ARTS 340.

440. **ADVANCED SCIENTIFIC ILLUSTRATION II (3).** Advanced study and application of contemporary techniques of scientific illustration. Students continue to work in laboratories of NIU scientists, illustrating research being performed. May be repeated. PRQ: ARTS 439.

446. **ADVANCED CERAMICS (3 or 6).** Studio work with clay in various traditional and contemporary techniques with emphasis on problems selected for the individual student. Compounding of individual clay bodies and glazes, loading and firing, studio management. May be repeated. PRQ: Completion of 12 semester hours in ARTS 346 and pass portfolio review in ceramics, or consent of school.

447. **COMPUTER RASTER APPLICATIONS FOR ILLUSTRATION (3).** Study of the role of computer painting programs in illustration and the development/rendition of illustration concepts in commercial, editorial, and publishing venues using pixel, resolution-dependent software. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 215 or ARTD 201; and ARTS 437.

448. **COMPUTER VECTOR APPLICATIONS FOR ILLUSTRATION (3).** Study of the role of computer drawing programs in illustration and the development/rendition of illustration concepts in commercial, editorial, and publishing venues using object, resolution-independent software. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 215 or ARTD 201; and ARTS 437.

450. **DIGITAL FABRICATION WORKSHOP (3).** An introduction to the use of two- and three-dimensional design software and industrial output methodologies as applied to advanced creative works in studio or design.

451. **ADVANCED METALWORK, JEWELRY DESIGN, AND DIGITAL FABRICATION (3).** Intensive studio work in individually assigned techniques and processes. May be taken for 6 semester hours with consent of school. May be repeated. PRQ: ARTS 352.

452. **ADVANCED RESEARCH IN METALWORK, JEWELRY DESIGN, AND DIGITAL FABRICATION (3).** Studio research on specific techniques or processes selected in conference with instructor. Written or oral report required. May be taken for 6 semester hours with consent of school. May be repeated. PRQ: Completion of 12 semester hours in ARTS 451 and pass portfolio review in Metalwork, Jewelry Design, and Digital Fabrication.

456. **SCULPTURE WORKSHOP (3).** Intensive study of sculpture concepts and process. Focus varies, using contemporary sculpture trends in concept and materials. May be repeated to a maximum of 9 semester hours. PRQ: ARTS 361 and ARTS 362.

461. **ADVANCED SCULPTURE (3).** Development of a cohesive body of work for exhibition, slide documentation, and a written statement about the student's work. Opportunity for intensive study and studio work. Studio, research, and lecture. May be taken for 6 semester hours with consent of school. May be repeated to a maximum of 12 semester hours. PRQ: ARTS 362.

470. **ADVANCED FIBER WORKSHOP (3).** 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 taken for 6 semester hours with consent of school. May be repeated. PRQ: ARTS 368, ARTS 371, ARTS 372, or ARTS 374.

471. **SPECIAL TOPICS IN FIBER (3).** Emphasis on specific topics or processes within the fiber curriculum. Special topics include Artist Books, Japanese Papermaking, T-Shirt, Body Architecture, Garment as Metaphor, Recycle/Re-Seen, Upholstery as Metaphor, and others. May be repeated.

Art and Design Faculty

Michael Barnes, M.F.A., University of Iowa, professor
 Sinclair Bell, Ph.D., University of Edinburgh, associate professor
 Douglas G. Boughton, Ph.D., University of Alberta (Canada), professor
 Todd Buck, M.A.M.S., University of Illinois, Chicago, professor
 Sarah Evans, Ph.D., University of California, Berkeley, associate 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
 Cynthia Hellyer-Heinz, M.F.A., Northern Illinois University, associate professor
 Rebecca Houze, Ph.D., University of Chicago, professor
 Joseph Insley, M.F.A., M.S., University of Illinois, Chicago, research associate professor
 Kathryn Kahn, M.F.A., Yale University, associate professor
 Yih-Wen Kuo, M.F.A., Southern Illinois University, professor
 Jessica Labatte, M.F.A., School of the Art Institute of Chicago, assistant professor
 Christine LoFaso, M.F.A., School of the Art Institute of Chicago, professor
 Kimberly Martens, M.A.M.S., University of Illinois, Chicago, professor
 Helen Nagata, Ph.D., Stanford University, associate professor
 James Obermeier, M.F.A., Indiana University, associate professor
 Mary Quinlan, Ph.D., University of Chicago, professor
 Catherine Raymond, Ph.D., Sorbonne Paris (France), Presidential Engagement Professor
 Michael Rea, M.F.A., University of Wisconsin, Madison, associate professor
 Nina Rizzo, M.F.A., University of Texas, Austin, associate professor
 John Sibilik, M.F.A., Southern Illinois University, associate professor
 Lee Sido, M.F.A., Northern Illinois University, associate professor emeritus
 Richard Siegesmund, Ph.D., Stanford University, professor, assistant director
 Kryssi Staikidis, Ed.D., Columbia University, New York, professor
 Perrin Stamatis, M.F.A., University of Illinois, Chicago, assistant professor
 Frank Trankina, M.F.A., School of the Art Institute of Chicago, professor
 Ann van Dijk, Ph.D., Johns Hopkins University, associate professor
 Amanda VanValkenburg, M.F.A., School of the Art Institute of Chicago, assistant professor
 Shei-Chau Wang, Ed.D., Northern Illinois University, associate professor
 Bart Woodstrup, M.F.A., Rensselaer Polytechnic Institute, associate 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 (20-25)

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 (4)
 MUTC 201, and MUTC 202 - Music Theory III and IV (4)
 MUTC 203 and MUTC 204 - Aural Skills III and IV (4)
 (Students in the jazz studies area of study must substitute MUSP 203 and MUSP 204, Aural Foundations of Improvisation I and II (4), 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)

[^] This is a Writing Infused Course.

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 must earn a C or better in all courses required for licensure. A minimum NIU cumulative GPA of 2.50 is required for enrollment in MUED 150, MUED 250, MUED 251, MUED 350, MUED 351, MUED 352, MUED 353, MUED 490, and MUED 495. Enrollment in said courses is by request and must be approved by the Music Education faculty. Students may be asked to update their TB tests and criminal background checks for each clinical placement; criminal background checks are not processed through NIU. Students are required to exhibit and maintain appropriate dispositions for licensure as assessed by the Music Education faculty.

To be considered for full admission into the Music Education licensure program, students must have at least an NIU cumulative GPA of 2.50; pass MUTC 101, MUTC 102, MUTC 103, MUTC 104, MUTC 201, MUTC 202, MUTC 203, MUTC 204 with a C or better; earn a C or better in MUED 150, MUED 250, MUED 251; and pass the *Admission to Teacher Licensure in Music Functional Musicianship Exam and Content Interview* at the end of MUED 250.

Following full admission into the Music Education licensure program, students whose NIU cumulative GPA falls below the required 2.50 or students who have not successfully completed prerequisites may not be allowed to continue in the program. Students may appeal in writing for one probationary semester to the Coordinator of Music Education. Students must apply for student teaching placements by the Friday of finals week one year before the requested semester (spring for spring, fall for fall). Final approval for student teaching includes a review of student records, a passing score on the Illinois Music Content Exam, and the completion of all other major requirements including required course work and student recital. Vocal music education students are also expected to pass a piano proficiency exam prior to approval for student teaching. Questions regarding requirements for music education should be directed to the 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 World Languages and Cultures.

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)

* Available for general education credit.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

¹ MUSP 110 - Piano Secondary, may be substituted for any group piano requirement with the consent of the piano faculty.

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)
 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 324 - Jazz Combo (3)
 MUSE 350 - Jazz Ensemble (3)
 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 (50-52)

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 (4)
 MUTC 201 and MUTC 202 - Music Theory III and IV (4)
 MUTC 203 and MUTC 204 - Aural Skills III and IV (4)
 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.): 50-64

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 WESTERN MUSICAL TRADITIONS (3). Broadens understanding of musical traditions of Europe and North America. Emphasis on the study of major composers, styles, genres, and social and historical context. Engagement with music through listening, live performance, and interaction with other musicians.

221. INTRODUCTION TO JAZZ MUSIC (3). Enhance an understanding, appreciation, and enjoyment of jazz. Divided broadly into three activities: study of music fundamentals, rhythmic structure, and form; listening lessons arranged to illustrate the evolution of jazz music; and study of the origins of this American art form and its relationship to the social, economic, and political climates in which it developed.

222. WORLD MUSIC AND CULTURE (3). Surveys the unique and changing meanings of music from historical, political, and religious perspectives through engagement in interactive musical activities. Examination of specific musical practices of various world cultures, how music is perceived within its sociocultural context, and establishment of a mindset for global interconnections.

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 history, philosophy, religion, and performance practices of Southeast Asian music traditions with emphasis on their cultural significances and the global connections as exemplified by contemporary music trends of selected Southeast Asian countries.

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 MUTC 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 (2). 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 (2). Continuation of MUTC 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 MUTC 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 MUTC 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 (2). Continuation of MUTC 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 (2). 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. INTRODUCTION TO ELECTRONIC AND COMPUTER MUSIC I (2). Laboratory introduction to the techniques of electronic music composition within a digital audio workstation (DAW) environment. Topics include audio editing, digital processing of sound, MIDI sequencing, and digital synthesis. PRQ: Consent of school.

212. INTRODUCTION TO ELECTRONIC AND COMPUTER MUSIC II (2). Further study and experimentation with techniques introduced in MUTC 211. Emphasis on live digital signal processing (dsp) and interactive electronic music composition using MaxMSP. PRQ: MUTC 211 or consent of school.

214. AUDIO, VIDEO, AND NETWORKING FOR THE WORKING MUSICIAN (3). Introduction for music majors to a practical application of audio, video, and networking. Fundamental concepts include the histories of audio and video, human anatomy as it applies to perception of aural and visual media and typical applications of explored technologies.

215. APPLIED EDITING TECHNIQUES (2). Practicum with hands-on experience editing audio. Topics covered include quantization, sample accurate editing, tuning, and noise removal and reduction.

216. AURAL SKILLS FOR THE AUDIO PROFESSIONAL (2). Development of isomorphic mapping through the study of both technical and theoretical aspects of sound.

223. **APPLIED MIXING TECHNIQUES (2).** Practicum with hands-on experience mixing different genres of music, learning about the mixing signal chain, and finalizing media for various distribution mechanisms.

224. **LIVE SOUND THEORY, TECHNIQUES, AND PRACTICUM (2).** Practicum hands-on experiential studio and location recording techniques course.

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.

320. **FUNDAMENTALS OF STUDIO DESIGN (2).** Fundamental concepts including studio construction, room acoustics and best practices for construction and calibration.

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).** Introductory course acquainting students with techniques of professional recording as applied directly to all phases of reproduction. Emphasis will be paid to mastering topics such as microphones, acoustics, multitrack recording and professional mixing techniques. PRQ: Ability to read music and consent of school.

401. **ADVANCED DIGITAL AUDIO WORKSTATIONS OPERATION (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 (ProTools). 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.

403. **APPLIED RECORDING TECHNIQUES (2).** In-depth exploration of digital audio workstations (DAW) and studio techniques for the purposes of recording, editing, mixing and mastering audio. PRQ: MUTC 400 and MUTC 401.

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 MUP 203. Further development of skills in melody memorization, aural transposition, chord recognition, and solo etudes. PRQ: Grade of C or better in MUP 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 MUP 205.

207. GUITAR SKILLS II (1). Continuation of MUP 107. Emphasis on the study of chordal jazz accompaniment and improvisation. May be repeated. PRQ: MUP 107 or consent of school.

208. GUITAR IMPROVISATION II (1). Continuation of MUP 108. Emphasis on the development of standard jazz repertoire. May be repeated. PRQ: MUP 108 or consent of school

210. PIANO: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. Keyboard students only. May be repeated.

211. ORGAN: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. Keyboard students only. May be repeated.

212. HARPSICHORD: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. Keyboard students only. May be repeated.

213. HARP: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. Harp students only. 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). Emphasis on performance, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. Voice students only. 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). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required week convocations. 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. CRQ: MUSE 360.

216. VIOLA: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required week convocations. 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. CRQ: MUSE 360.

217. VIOLONCELLO: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required week convocations. 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. CRQ: MUSE 360.

218. CONTRABASS: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required week convocations. 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. CRQ: MUSE 330, or MUSE 331, or MUSE 350, or MUSE 360.

219. GUITAR: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required week convocations. 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). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required week convocations. 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. CRQ: MUSE 330 or MUSE 331 or MUSE 350 or MUSE 360.

221. OBOE: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required week convocations. 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. CRQ: MUSE 330 or MUSE 331 or MUSE 350 or MUSE 360.

222. CLARINET: PRIMARY (1-4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required week convocations. 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. CRQ: MUSE 330 or MUSE 331 or MUSE 350 or MUSE 360.

318. CONTRABASS: PRIMARY (2 or 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330 OR MUSE 331 OR MUSE 350 OR MUSE 360.

319. GUITAR: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school.

320. FLUTE: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, OR MUSE 335, MUSE 350 OR MUSE 360.

321. OBOE: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, MUSE 350, OR MUSE 360.

322. CLARINET: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, MUSE 350, OR MUSE 360.

323. SAXOPHONE: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, MUSE 350, OR MUSE 360.

324. BASSOON: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, MUSE 350, OR MUSE 360.

325. TRUMPET: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, MUSE 350, OR MUSE 360.

326. FRENCH HORN: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, MUSE 350, OR MUSE 360.

327. TROMBONE: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, MUSE 350, OR MUSE 360.

328. TUBA AND EUPHONIUM: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, MUSE 350, OR MUSE 360.

329. PERCUSSION: PRIMARY (2 OR 4). Emphasis on performance of appropriate literature, with proficiency requirements at each level. Fundamentals of pedagogy and additional literature addressed in required weekly convocations. 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. PRQ: Consent of school. CRQ: MUSE 330, MUSE 331, 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 MUSE 105 and MUSE 106, or MUSE 210 (jazz section), and grade of C or better in MUSE 160 and MUSE 204.

333. JAZZ IMPROVISATION II (2). Continuation of MUSE 367A. Extensive study of improvisational techniques. Solo study, transcriptions, listening assignments, aural and theoretical development. PRQ: MUSE 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 MUSE 204; or consent of school.

336. CONDUCTING II: INSTRUMENTAL (2). Conducting principles and techniques as applied to instrumental ensembles. PRQ: MUSE 335.

337. CONDUCTING III: CHORAL (2). Conducting principles and techniques as applied to vocal ensembles. PRQ: MUSE 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.

345. SURVEY OF ORCHESTRAL BRASS MUSIC (1). Highlights orchestral repertoire with a focus on the brass passages. Designed for performance students who have an interest in orchestral literature and how brass performance relates to the orchestra as a whole. Works will be played to a "reading standard." May be repeated to a maximum of 3 semester hours.

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. May be repeated.

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, MUTC 204, MUSE 335, and MUED 350; 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, MUED 173, MUED 174. CRQ: MUED 353 or consent of school.

353. CLINICAL EXPERIENCE IN SECONDARY MUSIC (1). Directed observation and supervised participation in high school 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, MUSE 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: MUSE 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

Omar al-Musfi, M.M., Northern Illinois University, instructor
Orna Arania, D.M., Northwestern University, associate professor
Elizabeth Barber, D.M., Northwestern University, instructor
Gregory Barrett, D.Mus., Indiana University, professor
Gregory Beyer, D.M.A., Manhattan School of Music, professor
Thomas Bough, D.M.A., Arizona State University, professor
Geof Bradfield, M.F.A. California Institute of the Arts, professor
James Russell Brown, M.M., New England Conservatory, instructor
Ricardo Castañeda, M.M., Northwestern University, instructor
Robert Chappell, M.M., University of North Texas, visiting professor

Christine D'Alexander, D.M.A., University of Southern California, assistant professor
Arthur Davis, M.M., University of Illinois, instructor
Anthony Devroye, Performance Diploma, Curtis Institute of Music, professor
Mary Lynn Doherty, Ph.D., University of Wisconsin, associate professor
John Floeter, B.M., DePaul University, instructor
Tom Garling, M.M., University of Miami, instructor
John Gaudette, Diploma, Curtis Institute of Music, instructor
William Goldenberg, D.Mus., Indiana University, Distinguished Teaching Professor
Fareed Haque, B.M., Northwestern University, professor emeritus
Brian Hart, Ph.D., Indiana University, professor
Janet Hathaway, Ph.D., New York University, associate professor
Eric Johnson, D.M.A., University of Illinois, professor
I Gusti Ngurah Kertayuda, National Performing Arts Institute (Indonesia), instructor
JeongSoo Kim, D.M.A., New England Conservatory, associate professor
Edward Klonoski, Ph.D., Ohio State University, associate professor
Kelly Langenberg, M.M., De Paul University, instructor
Cheng-Hou Lee, D.M.A., New England Conservatory, associate professor
Blaise Magnière, M.M., Cleveland Institute of Music, associate professor
David Maki, D.M.A., University of Michigan, professor and assistant director
Lucia Matos, D.M.A., University of Iowa, associate professor
Jeremy Moeller, M.M., Rice University, instructor
Ann Montzka-Smelser, M.M., Northern Illinois University, instructor
Myron B. Myers, M.M., University of Southern California, professor
Dan Nichols, M.M., Northern Illinois University, instructor
John K. Novak, Ph.D., University of Texas, professor
Elinor Olin, Ph.D., Northwestern University, instructor
Brian Penkrot, Ph.D., University of Iowa, instructor
Mark Ponzio, D.M.A., Eastman School of Music, professor
Matthew Romriell, M.F.A., Northern Illinois University, instructor
Marlene Rosenberg, M.M., Northwestern University, instructor
Faye Seeman, M.M., Boston University, instructor
Robert L. Sims, Artistic Diploma, Northwestern University, professor
Phillip Sink, D.M., Indiana University, assistant professor
Thomas Snyder, M.M., Arizona State University, instructor
Mathias J. Tacke, Diploma, Northwest German Music Academy, professor
Liam Teague, M.M., Northern Illinois University, Presidential Research, Scholarship and Artistry Professor
Scott Tegge, Professional Diploma, Roosevelt University, instructor
Reggie Thomas, M.M., Southern Illinois University, professor
Rodrigo Villanueva, M.M., University of North Texas, professor
Ben Wahlund, M.M., Northern Illinois University, instructor
Jui-Ching Wang, D.M.A., Arizona State University, associate professor
Marie Wang, M.M., Northern Illinois University, associate 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 377, 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 majors in dance performance, 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 (49)

Theatre Arts Core (12)

THEA 214 - Introduction to Performance (3)
 OR 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 412 - Directing II (3)

THEA 466 - The Business of Theatre (2)

THEA 492 - Senior Research Project (2),

OR THEA 495 - Internship in Theatre Arts (2)

Course work from the following with each course taken for at least 1 hour (3):

THEA 377 - Theatre Performance Practicum (1)

THEA 395 - Production Practicum (1)

Course work from the following (9)

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 338 - Makeup Techniques (3)

THEA 341 - Lighting Technology (3)

THEA 347 - Theatrical Props Design and Management I (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 (1-6)

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 - Musical 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.

Total Hours for a Major in Theatre Studies (B.A.): 49-61

* Available for general education credit.

^ This is a Writing Infused Course.

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 (1)
 THEA 214 - Introduction to Performance (3)
 THEA 214A - Introduction to Physical Engagement in Performance (1)
 THEA 217 - BFA1 Studio Premiere (1)
 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 377 - Theatre Performance Practicum (2)
 THEA 395 - Production Practicum (1)
 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 465 - Managing the Performing Arts (3)
 THEA 466 - The Business of Theatre (3)
 THEA 491 - Topics in Theatrical Performance (5)
 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.

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 - Drafting 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 - Production Practicum (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)
 Two of the following (6)
 THEA 335 - Costume Technology (3)
 THEA 338 - Make-up Techniques (3)
 THEA 341 - Lighting Technology (3)
 THEA 347 - Theatrical Props Design and Management I (3)
 THEA 355 - Scene Technology (3)
 Course work from the following (12)
 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)
 THEA 460 - Vectorworks Drafting (3)
 THEA 461 - Light Board Programming and Automated Fixtures (3)
 THEA 462 - Portfolio Development (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.

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

Major in Dance Performance (B.F.A.)

Requirements in Department and School (74)

Theatre Arts Core (12)

TH-D 475 - History of Dance: 17th Century to Modern Times (3)
 TH-D 286 - Dance Improvisation (3)
 TH-D 353X - Analysis and Pedagogy of Dance (3)
 TH-D 377 - Dance Performance (4)
 TH-D 420 - The Business of Dance (3)
 TH-D 474 - Dance Philosophy and Aesthetics (3)
 THEA 110 - Fundamentals of Acting for the Non-Major (3)
 THEA 395 - Production Practicum (1)

* Available for general education credit.

^ This is a Writing Infused Course.

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)

- THEA 495 - Internship in Theatre Arts (1-9)
- TH-D 308 - Pointe (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 477 - Special Studies in Dance (1)
- 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. dance performance major are required to audition each semester for performance opportunities.

Students pursuing the B.F.A. Dance Performance major 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. Dance performance major 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 major of any student who shows unsatisfactory progress as determined by the dance faculty.

Total Hours for Dance Performance Major: 81

Minor in Dance Performance (22)

Declaration of this minor by theatre arts majors, with the exception of B.F.A. majors in dance performance, is permitted.

TH-D 377 - Dance Performance (2)

TH-D 475 - History of Dance 17th Century to Modern Times (3)

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)

- TH-D 286 - Dance Improvisation (3)
- TH-D 308 - Pointe 1 (1)
- TH-D 320 - Male Ballet Technique (1)
- TH-D 330 - Musical 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 - Production Practicum (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 fine art vehicle of meanings, and cultural values. Contributions of playwright, actor, director, designer, technician, and audience to the theatrical event. Practical exercises in theatrical production, especially as contrasted with mediated drama. Attendance at NIU School of Theatre and Dance productions is required. Not open to School of Theatre and Dance 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.

214A. INTRODUCTION TO PHYSICAL ENGAGEMENT IN PERFORMANCE (1). Fundamentals of preparation to act/perform introduced through movement, breath, and voice. Introduction to the basic techniques of physical engagement.

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.

217. BFA1 STUDIO PREMIERE (1). Initial practicum experience for first-semester students majoring in acting. PRQ: Major in acting or consent of school.

* Available for general education credit.

^ This is a Writing Infused Course.

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. **DRAFTING 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; and ENGL 203 or ENGL 204.

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.

338. **MAKE-UP TECHNIQUES (3).** Principles and processes involved in advanced makeup techniques for the performing arts. Exploration in 2-dimensional and 3-dimensional makeup application techniques including character development, 3-dimensional application, and custom latex prosthetics. Weekly 3-hour supervised and/or independent laboratory experience in makeup 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.

347. **THEATRICAL PROPS DESIGN AND MANAGEMENT I (3).** Principles and processes involved in theatrical properties. Emphasis on research, procurement, organizational and technical skills used by the properties department. Weekly 3-hour supervised and/or independent laboratory experience in scene 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 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.

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.

377. THEATRE PERFORMANCE PRACTICUM (1). Practicum experience in performance areas of theatre, acting, directing, dramaturgy. 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.

379. PERSPECTIVES ON CREATIVITY (3). Overview of creative and divergent thinking in art, business, politics, education and engineering. Collection and comparison of examples of creative lives and creative activities. Mapping of personal creative potential through a variety of practical exercises.

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.

382. SHAKESPEARE IN PIXELS (3). Examination and discussion of films based on Shakespeare's life and plays. Comedies, tragedies, history plays and romances from Hollywood and around the world. Special qualities of theatre and film. How to make one into the other. Screenplay as final project.

395. PRODUCTION PRACTICUM (1). Practicum experience in production areas of theatre, 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.

460. VECTORWORKS DRAFTING (3). A thorough introduction to Vectorworks, including 2D drafting, the development of 3D models, and lighting design using Vectorworks Spotlight.

461. LIGHT BOARD PROGRAMMING AND AUTOMATED FIXTURES (3). Introduction to several theatrical lighting consoles, including those produced by Electronic Theatre Controls, Flying Pig Systems, and GrandMA. Emphasis will be place on the online and offline use of these consoles, pre-visualization techniques, and the use of LED and automated fixtures.

462. PORTFOLIO DEVELOPMENT (3). Skills needed to develop and present a professional portfolio, website, and resume for a career in professional theatre. Emphasis is placed on theatrical production photography, computer editing skills, and public presentation skills.

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.

483. INTERCULTURAL PERFORMANCE: COLONIALISM, POST-COLONIALISM, AND THE GLOBAL (3). Introduction to the theater, drama, and performance of the past 400 years in local, national, and international contexts. Exploration of the following: the idea of a "traditional" performance; how performance participates in--and challenges--the colonialism of a particular time period; the ways in which intercultural performance becomes "political;" and the problematics of intercultural performance and the possibilities of cultural exchange.

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 (1-12). 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 12 semester hours per semester. May be repeated to a maximum of 12 semester hours as topic varies. PRQ: Consent of school.

492. SENIOR RESEARCH PROJECT (2). 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 2 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 12 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 School of Theatre and Dance majors or minors.

286. DANCE IMPROVISATION (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. MUSICAL THEATRE DANCE (2). History of dance in American Musical Theatre through practical dance applications. Includes dances from Broadway musicals starting with Show Boat and progressing through contemporary musicals. Emphasis is on learning as many different styles of dance as possible while examining technique, history, costuming, and music that influences American Musical Theatre Dance. Some styles of dance learned include the Charleston, basic ballroom dance, vaudeville numbers, etc. Technique, style, and musicality also included. 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.

474. DANCE PHILOSOPHY AND AESTHETICS (3). Philosophy of dance including aesthetic principles and critical evaluations of varying dance forms and styles.

475. HISTORY OF DANCE 17TH CENTURY TO MODERN TIMES (3). Historical development of dance from the 17th century to modern times, considering cultural and artistic interdependencies.

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, Presidential Engagement professor, director

Judith Q. Chitwood, M.A., University of Cincinnati, professor

Gibson A. Cima, Ph.D., University of Washington, assistant professor

Stanton Davis, M.F.A., University of Delaware, associate professor

Alex Desimone, M.F.A., Northern Illinois University, instructor

David Doherty, B.F.A., Northern Illinois University, instructor

Jeremy Floyd, M.F.A., Northwestern University, assistant professor

Paula Frasz, M.F.A., University of Illinois, professor

Kathryn Gately-Poole, M.F.A., Mason Gross School of the Arts, professor emeritus

Rich Grund, B.F.A., Northern Illinois University, assistant professor

Lori Hartenhoff, M.F.A., University of Wisconsin, professor

Kendra Holton, M.F.A., Northern Illinois University, instructor

Chris Kurszewski, M.F.A., Northern Illinois University, instructor

Kay Martinovich, Ph.D., University of Minnesota, assistant professor

Terrence McClellan, M.F.A., University of Massachusetts, professor

Kevin Nedberg, M.F.A., Northern Illinois University, instructor

Tracy Nunnally, M.F.A., Florida State University, professor

Melanie Parks, M.F.A., University of Illinois, professor

410 THEATRE AND DANCE

Clare Richey-Kaplan, B.F.A., University of Wisconsin-Milwaukee,
instructor

Patricia L. Ridge, Ph.D., University of Colorado, Boulder,
professor emerita

Deborah Robertson, M.F.A., Smith College, professor emerita

Matt Romriell, M.F.A., Northern Illinois University, instructor

Suzanne Rosenik, B.A., Northern Illinois University, instructor

Sahin Sahinoglu, M.F.A., Northern Illinois University, professor

Robert Schneider, D.F.A., Yale University, associate professor

Patricia Skarbinski, M.F.A., Northern Illinois University, associate
professor

Brandon Wardell, M.F.A., Northwestern University, associate
professor

Inter-College Interdisciplinary Certificates and Programs

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 - Drugs in Society (3)
^PHHE 406 - Dimensions of Human Sexuality (3)
^PHHE 408 - Mental and Emotional Health (3)
PSYC 424¹ - Adolescent Development (3)
TLCI 422 - Middle School Organization and Instruction (3)
^SOC 488 - Juvenile Delinquency (3)
*WGSS 332 - Growing Up Girl (3)

Group Two

EPS 492² - Special Topics in Educational Psychology (3)
HDFS 489² - Topical Issues in Human Development and Family
Sciences (3)
PHHE 472² - Current Issues: Health Education (3)
PSYC 495² - Seminar in Special Topics (3)
HIST 473² - Topics in Women's History (3)
WGSS 430² - Special Topics in Women's and Gender Studies (3)

Applied Ethics (12)

Coordinator: Jason Hanna, Department of Philosophy

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, Ethics, 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)
COMS 481 - Communication Ethics in Organizations (3)
ENVS 303 - Environment in the Social Sciences and Humanities
(3)
HSCI 410 - Legal and Ethical Issues for Health and Human
Sciences Professionals (3)
JOUR 480 - Journalism Law and Regulation (3)
PHHE 435 - Ethical Decision Making for Health Professionals (3)
PHIL 334 - Animal Ethics (3)
PHIL 335 - Environmental Ethics (3)
*PHIL 336 - Biomedical Ethics (3)
PHIL 337 - Business Ethics (3)
PHIL 338 - Philosophy of Food (3)
PHIL 353 - Philosophy of Law (3)
PHIL 390³ - Contemporary Topics in Philosophy (3)
PHIL 430³ - Topics in Ethics (3)
POLS 359 - War, Empire, and Ethics (3)
PSPA 411 - The Ethical Public Administrator (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-practice risk management preparation, response, and recovery

* Students with appropriate public safety experience substitute an upper-division elective.

^ This is a Writing Infused Course.

Fulfills the Human Diversity Requirement.

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.

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 310X - 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: Theodore Hogan, 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 - Chemical Hazards in 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: David Changnon, Department of Geographic and Atmospheric Sciences; Alan Polansky, Department of Mathematical Sciences

- STAT 300 - 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 400 - Probability (3),
OR ACSC 400X - Probability (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)
 - *HSCI 430 - Working with Diverse Populations in Health and Human Sciences (3)
 - HSCI 450 - Administration for Professionals in Health and Human Sciences (3)
OR AHLS 446 - Principles of Laboratory Management and Practice (1)
 - *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 ^HSCI 460 - Research in Health and Human Sciences (3)
 - PHHE 469 - Principles of Health Planning (3)
 - TECH 231 - Safety Programs (3)
- Elective course chosen with approval of certificate coordinator (3-6)

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

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 key factors influencing the transition into the university. Development of skills and practices of critical thinking, problem solving, and communication to improve academic success with a focus on student responsibility for learning. Available only to students in their first two semesters at NIU.

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. Continued development of skills and practices of critical thinking, problem solving, and communication to improve academic success. Available only to transfer students in their first two semesters at NIU. PRQ: New transfer student with 12 or more semester hours at time of transfer.

UNIV 310X. FOUNDATIONS IN HOMELAND SECURITY AND DISASTER PREPAREDNESS (3). *Crosslisted as TECH 432*. 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 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.

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.

Office of Educator Licensure and Preparation

OELP 201. INTRODUCTION TO THE EDTPA (1). Explore the requirements and expectations of the edTPA. Explanation of the various edTPA tasks including planning, instruction, assessment, academic language, and identifying evidence of practice. Resources and materials will be shared. Open only to students who have been accepted into a teacher licensure program at Northern Illinois University or who are seeking a licensure in Illinois but have not completed the state mandated edTPA. PRQ: Proof of enrollment in educator licensure program at NIU or consent of the Office of Educator Licensure and Preparation.

OELP 401. PREPARING FOR THE EDTPA (1). Analyze original submission of the edTPA to identify strengths and weaknesses. Use support documents and handbook of the discipline to identify requirements and expectations of the edTPA and relate expectations to original submission. Explore tasks of the edTPA including planning, instruction, assessment, academic language, and identifying evidence of practice by reading current literature and reviewing best practice. PRQ: Successful completion of student teaching at NIU.

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

Acting Director: Anne Edwards, M.B.A.

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 Acting Director, Anne Edwards, M.B.A., of the Center for Black Studies for information about student organizations and cultural events sponsored by the center. Students should contact the Associate Director for Academic Affairs, Joseph Flynn, Ph.D., for current course offerings.

Minor in Black Studies

The Black studies minor presents an interdisciplinary body of knowledge that examines the histories and cultures of African Americans with an appreciation for the historical, social, and political influences of Africa and the African Diaspora. Among other requirements students must analyze racism and its present-day manifestations in order to promote better understanding among ethnic and racial groups. Several university departments participate in the minor in Black studies including anthropology, economics, geographic and atmospheric sciences, history, political science, and sociology. A maximum of 9 semester hours may be applied toward the minor from any one department with the exception of Black Studies (BKST) courses. Students may apply up to 6 semester hours from their major course of study to the minor.

Requirements (18)

Core Courses (9)

- **BKST 200 - Racism in American Culture and Society (3)
- *BKST 300 - Foundations of Black Studies (3)
- BKST 493 - Afrocentricity (3)

Additional Course Work (9)

- Three of the following (9)
 - ANTH 404 - Peoples and Cultures of the Caribbean (3)
 - BKST 202 - Issues Facing African-American Students (3)
 - **BKST 211 - Educating for Cultural Sensitivity (3)
 - *BKST 219 - Introduction to African Studies (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)
 - ECON 341C - Economic Area Studies: Africa, South of the Sahara (3)
 - GEOG 336 - Geography of Africa (3)
 - *HIST 348 - African History to 1600 (3)
 - **HIST 349 - African History Since 1600 (3)
 - *^HIST 353 - Women in African History (3)
 - *HIST 354 - History of Black American Business and

- Entrepreneurship (3)
- ^*HIST 355 - History of Black American Music (3)
- **HIST 364 - African-American History to 1865 (3)
- **HIST 365 - African-American History Since 1865 (3)
- *^HIST 375 - Civil Rights Movement, 1954-1974 (3)
- *^HIST 440 - Islam and Colonialism in Africa (3)
- *HIST 441 - The African Diaspora (3)
- JOUR 490 - Ethnic Minorities and the News Media (3)
- POLS 368 - Politics of Africa (3)
- SOCI 361 - Race and Ethnicity (3)
- THEA 477 - African-American Theatre (3)

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 28 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: Christina Abreu, Ph.D.

The Center for Latino and Latin American Studies (CLLAS) is an academic, research, and outreach center that serves as a home for the interdisciplinary study of Latin America, the Caribbean, and the Latinx experience in the United States. The CLLAS supports faculty and student research and scholarship, administers a minor in Latino and Latin American Studies and a graduate concentration in Latin American Studies, and organizes academic and cultural programming as well as campus and community outreach activities. The CLLAS also sponsors the NIU Latinx Oral History Project, which documents the lives and experiences of Latinxs in the Midwest.

Center for Southeast Asian Studies

Acting Director: Eric Jones, 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

* Available for general education credit.

Fulfills the Human Diversity Requirement.

^ This is a Writing Infused Course.

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 the academic year and for summer language study. 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 Affairs

Associate Vice President: Bradley Bond

The Division of International Affairs 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 international travel plan 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 six 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 Internship 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, Belize, Bolivia, Botswana, Brazil, Canada, Chile, China, Costa Rica, Croatia, Czech Republic, Denmark, Dominican Republic, Ecuador, Fiji, Finland, France, Germany, Ghana, Greece, Hungary, Iceland, India, Indonesia, Ireland, Italy, Japan, Republic of Korea, Laos, Madagascar, Malaysia, Mongolia, Morocco, Nepal, The Netherlands, New Zealand, Nicaragua, Norway, Panama, Peru, Poland, Portugal, Russian Federation, Rwanda, Samoa, Serbia, Sierra Leone, South Africa, Spain, Sweden, Switzerland, Taiwan, Tanzania, Thailand, Uganda, United Arab Emirates, United Kingdom, Uruguay, and Vietnam.

NIU currently offers faculty-directed programs in over 18 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, spring break, 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.

Argentina: Latin American Culture and Spanish Language. Mid May to early June. In cooperation with the Centro de Español como Lengua Extranjera (CELE) at the Universidad Nacional de Cuyo in Mendoza, Argentina. The program will introduce students to Argentine and Latin American culture, the courses and the program are designed to be a gateway to pursue other interests and fields. (UG)

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)

China: History, Culture and Society. Mid May to mid-June. In cooperation with Chongqing College of Posts and Mobile Telecommunications (CMT) and Shanxi Agricultural University College of Telecommunications (CT). The program allows students to focus on developing a deep understanding of Chinese history, culture and life. It will consist of in-class "traditional" lectures as well as interactive sessions with students in China, travel-study to explore contemporary issues and more. (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: La Vie Provençale, Aix-en-Provence. Late May to mid-June. In cooperation with IAU College in France. Students will develop a profound understanding and appreciation of French culture through this immersive experience. Participation in this program will greatly benefit the language competence of the students and is therefore an integral part of the French Language Curriculum at NIU. (UG)

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)

Germany: Deutschland Heute: Facets of Contemporary German. Mid May to early June. In cooperation with Internationales Haus Sonnenberg, St. Andreasberg, Germany. Students will be introduced to Germany's language and culture in an immersion setting. Students will deepen their knowledge and add further impressions during trips to sites spanning the northern half of Germany from Bremerhaven to Hanau. (UG)

Ireland: Exploring Ireland's Health Care Services. Early to late July. Students will learn about the history of Ireland's health care system and the variety of Ireland's health services. This will include specialties in nursing, public health, and health studies. (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)

Mexico: NIU-Human Connections Global Internship. Mid May to mid-June. Students will engage in an immersive international internship experience; learn through dialogue and human relationships and begin to understand the needs and capacity of diverse global communities; and gain leadership and professional skills through engagement in their internship and workshops with local leaders. (UG)

Mexico: Developing and Facilitating Socially Responsible Experiential Learning Opportunities. Early to mid-July. Students will learn how to develop, facilitate, and create experiential learning opportunities for students. In particular, the course will focus on study abroad, service learning, sustainable volunteering, and internships. Through course work, students will learn about how to create and facilitate these types of experiences for students. There will also be an experiential component to the course in Bucerías, Mexico. (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)

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: Environment and Society in Tanzania. Mid to late May. This two-week field course will involve travel to Tanzania to learn about and experience the landscape, natural environment and local cultures of Tanzania. Students will have an opportunity to diversify their educational experience through "living it and seeing it" in the natural environment. The program allows students to broaden their knowledge of Africa and learn through exploring the interplay of culture, economics, politics and environment in the context of change. (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

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 Scholar Services

Associate Director: Stephanie Brown

The International Student and Scholar Services 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

Mark W. Cordes, J.D., interim dean
Mark Falkoff, J.D., acting associate dean
Kathleen Coles, 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/>. In addition, NIU undergraduates in selected majors may be eligible to apply to the College of Law under one of the NIU "accelerated" programs. Students accepted into the College of Law pursuant to a "accelerated" program can start law school immediately after their junior year and can complete both their undergraduate degree and a law degree in a total of six years.

Graduate School

Bradley Bond, Ph.D., dean of the Graduate School and associate vice president for Graduate Studies

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 Accountancy
 Master of Accounting Science (M.A.S.)
 Master of Science in Taxation (M.S.T.)

Department of Finance

Master of Science (M.S.)

Department of Management

Department of Marketing

Master of Science in Digital Marketing (M.S.)

Department of Operations Management and Information Systems

Master of Science (M.S.)
 Data Analytics
 Management Information Systems
with or without specialization in
 Business Analytics
 SAP and Business Enterprise Computing

College of Education

Department of Counseling and Higher Education

Master of Science in Education (M.S.Ed.)
 Adult and Higher Education
 with or without specialization in
 Adult Education
 Higher Education
 Counseling
 Doctor of Education (Ed.D.)
 Adult and Higher Education
 with or without specialization in
 Community College Leadership
 Counselor Education and Supervision

Department of Curriculum and Instruction

Master of Arts in Teaching (M.A.T.)
 with specialization in
 Elementary Education with Initial Licensure
 Master of Science in Education (M.S.Ed.)
 Curriculum and Instruction
 Literacy Education
 Doctor of Education (Ed.D.)
 Curriculum and Instruction
 with specialization in
 Curriculum Leadership
 Literacy Education
 Science, Social Studies, and Environmental Education
 Integration

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 Philosophy (Ph.D.)
 Instructional Technology

Department of Kinesiology and Physical Education

Master of Science (M.S.)
 Athletic Training
 Sport Management
 Master of Science in Education (M.S.Ed.)
 Kinesiology and Physical Education
 with or without specialization in
 Adapted Physical Education
 Exercise Physiology/Fitness Leadership
 Pedagogy and Curriculum Development in Physical
 Education
 Sport and Exercise Psychology

Department of Leadership, Educational Psychology and Foundations

Master of Science in Education (M.S.Ed.)
 Educational Administration
 Educational Psychology
 Foundations of Education
 School Business Management
 Educational Specialist (Ed.S.)
 Educational Administration
 Doctor of Education (Ed.D.)
 Educational Leadership and Policy Studies
 with specialization in
 Educational Leadership
 Educational Policy Studies
 Doctor of Philosophy
 Educational Psychology

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
 Learning Behavior Specialist I
 Orientation and Mobility
 Vision Rehabilitation Therapy
 Visual Impairments

College of Engineering and Engineering Technology

Master of Science (M.S.)
 Integrated Systems Engineering
 with specialization in
 Mechatronics and Intelligent Systems
 Biomedical and Healthy Systems Engineering
 Master of Science in Teaching (M.S.T.)
 with specialization in
 Engineering Education

Department of Electrical Engineering

Master of Science (M.S.)
 with specialization in
 Applied Radio Frequency (RF) Engineering

Department of Industrial and Systems Engineering

Master of Science (M.S.)
 with specialization in
 Engineering Management

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

Doctor of Philosophy (Ph.D.)

School of Allied Health and Communicative Disorders

Master of Arts
 Communicative Disorders
 with specialization in
 Audiology
 Speech-Language Pathology
 Doctor of Audiology (Aud.)
 Doctor of Physical Therapy (D.P.T.)

School of Family and Consumer Sciences

Master of Science (M.S.)
 Applied Human Development and Family Sciences
 with or without specialization in
 Marriage and Family Therapy
 Leadership in Aging Studies

School of Health Studies

Master of Public Health (M.P.H.)
 with specializations in
 Health Promotion
 Health Services Management
 Master of Science (M.S.)
 Nutrition and Dietetics

School of Interdisciplinary Health Professions

Master of Science (M.S.)
Health Sciences
Rehabilitation Counseling

Department of Military Science

School of Nursing

Master of Science (M.S.)
Nursing
with or without specialization in
Adult-Gerontology Clinical Nurse Specialist
Adult-Gerontology Primary Care Nurse Practitioner
Family Nurse Practitioner
Nursing Education
Doctor of Nursing Practice (D.N.P.)

College of Liberal Arts and Sciences

School of Public and Global Affairs

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.)
Doctor of Philosophy (Ph.D.)

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 Geographic and Atmospheric Sciences

Master of Science (M.S.)
Geography
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.)
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.)
Doctor of Philosophy (Ph.D.)

Department of Psychology

Master of Arts (M.A.)
Doctor of Philosophy (Ph.D.)

Department of Public Administration

Master of Public Administration (M.P.A.)
with specialization in
Fiscal Administration
Local Government Management
Nonprofit Management
Strategic Public Management and Leadership

Department of Sociology

Master of Arts (M.A.)
with or without specialization in
Criminology

Department of Statistics and Actuarial Science

Master of Science (M.S.)
Statistics

Department of World Languages and Cultures

Master of Arts (M.A.)
World Languages and Cultures - Spanish and Hispanic Studies

College of Visual and Performing Arts

School of Art and Design

Master of Arts (M.A.)
with specialization in
Art History Research
Art History Teaching at the Two-Year College Level
Studio Art

Master of Science (M.S.)
with specialization in
 Art and Design Education
 Master of Fine Arts (M.F.A.)
 Doctor of Philosophy (Ph.D.)
 Art and Design Education

School of Music

Master of Music (M.M.)
with specialization in
 Music Education
 Performance
 Individualized Study
 Performer's Certificate

School of Theatre and Dance

Master of Fine Arts (M.F.A.)
 Theatre Arts
with specialization in
 Acting
 Design and Technology

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
 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
 Applied Mechanics
 Applied Statistics
 Art History
 Assistive Technology Instructional Specialist for People with Visual Impairments
 Behavior Analyst
 Bioinformatics
 CAD/CAM/CAE
 Children's and Young Adult Literature/Media
 College Teaching
 Data Analytics Using SAS Software - SAS Joint Certificate Program
 Digital Image Processing
 Digital Signal Processing
 Digital Systems
 Director of Special Education
 Distance Education
 Eating Disorders and Obesity
 Education in English Language Arts
 Elementary Mathematics Teaching
 Enterprise Management Using SAP Software
 Entrepreneurship
 Facilities Management
 Family and Child Development

Family Nurse Practitioner
 Finance
 Financial Engineering
 Foreign Language Instructional Technology
 Foundation of Accountancy
 Foundations of Education and Policy Studies
 Geographic Information Analysis
 Gerontology
 Health Education
 Higher Education Administration
 Homeland Security
 Industrial Control
 Integrated Manufacturing Systems
 Integrated Systems Engineering
 Interdisciplinary Study of Language and Literacy
 International Business
 Law and Women's and Gender Studies
 Leadership in Aging Services
 Lean Six Sigma
 Lesbian, Gay, Bisexual, and Transgender Studies
 Logistics
 Management Information Systems
 Managerial Leadership
 Medical Family Therapy and Counseling
 Mobile Programming
 Museum Studies
 Nursing Education
 Postsecondary Developmental Literacy and Language Instruction
 Public Health
 Public Management
 Quality Control of Manufacturing Processes
 Response to Intervention
 Semiconductor Devices
 Semiconductor Fabrication
 Simulation, Modeling and Data Analysis
 Southeast Asian Studies
 Spanish Language, Literature, and Culture
 Sport and Exercise Psychology
 Sport Management
 Strategic Marketing
 Teaching English as a Second Language and Bilingual Education
 Technical Writing
 Thermal, Fluid, and Energy Systems
 Traffic Safety Education
 Trauma-Informed Counseling
 Vibration, Robotics, and Control Systems
 VLSI Design
 Women's and Gender Studies
 Workplace Learning and Performance
 World Languages and Cultures - French and Francophone Studies
 World Languages and Cultures - German Studies
 World Languages and Cultures - Spanish and Hispanic Studies

Student-at-Large Classification

The student-at-large classification is available for those who wish to take graduate courses without pursuing a degree. A student-at-large must hold a baccalaureate or higher degree from an accredited institution in the U.S. or the equivalent from a recognized foreign institution and must apply for and be granted permission to register as a student-at-large through the Graduate School. Students-at-large are not admitted to the Graduate School or to any graduate degree program, but they are under the administrative jurisdiction of the Graduate School. Many of the same regulations, including those regarding academic standing, apply to both graduate students and students-at-large, as described in the Graduate Catalog. Some departments and programs limit the amount of graduate credit earned as a student-at-large that may be applied toward meeting the requirements of a graduate degree, if the student-at-large is later admitted to such a degree program. Students should consult the Graduate Catalog for specific information about particular programs.

Postgraduate students are those who hold baccalaureate degrees from accredited institutions and wish to take additional undergraduate courses or to earn a second baccalaureate degree. Postgraduates are classified as seniors and may take 100- through 400-level courses for undergraduate credit only; a postgraduate may not take courses for graduate credit. An individual who wishes to take 500-, 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.

University Libraries

Chalermsee Olson, M.A., M.L.S., acting dean
Rosanne Cordell, M.L.S., M.S., associate dean
T. J. Lusher, M.A., M.L.I.S., assistant dean

The Northern Illinois University Libraries system consists of Founders Memorial Library, and three branch libraries, which include 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 resources.

NIU Libraries are participants in the I-Share System, a network involving 145 academic institutions throughout Illinois. Access is via the World Wide Web and allows users to immediately determine which of the 86 I-Share 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, the Accessibility Resource Room, library instruction, document delivery services, the reserves collection, periodicals collection, media collection, and the Scholars' Den. Microforms, the map collection, government publications, the Writing Center, and the Test of Academic Proficiency Tutoring Center are located on the second floor; the Digital Convergence Lab, the Peer Assisted Learning (PAL) tutoring center, 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 or check online to be sure of the status.

NIU libraries provide a variety of guides to collections and services. These materials are available online at www.library.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 "Find Help" link on the libraries' website. 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. See www.Libguides.niu.edu/InfoLibraryResearch.

Libraries Faculty

Frederick Barnhart, M.L.I.S., J.D., dean
 T. J. Lusher, Ed.D., M.A., M.L.I.S., associate dean
 Jana Brubaker, M.L.S., M.A., associate dean
 Leanne VandeCreek, M.S.L.S., M.S. acting associate dean
 Meredith Ayers, M.S., Northern Illinois University, M.L.S., Kent State University, associate professor
 Frederick Barnhart, M.L.I.S., Indiana University, J.D., Chicago-Kent College of Law, Illinois Institute of Technology, professor
 Jana Brubaker, M.L.S., Indiana University, M.A., Northern Illinois University, associate professor
 Mary Burns, M.A., Case Western Reserve University, M.L.S., Kent State University, assistant professor
 Sarah Cain, M.L.I.S., University of Illinois, Urbana-Campaign; M.P.A., Southern Illinois University, Carbondale, assistant professor
 Wayne E. Finley, M.L.I.S., University of Illinois; M.B.A., Western Illinois University, Quad Cities, associate professor
 Larissa Garcia, M.A., Northern Illinois University, M.A.L.S., Dominican University, assistant professor
 Sarah Holmes, M.A., University of Hartford, M.L.I.S., Kent State University, assistant professor
 Karen Hovde, M.A., Western Washington University, M.A., Northern Illinois University, associate professor
 Wendell G. Johnson, M. Div. Trinity Evangelical Divinity School, M.A., Ph.D., Rice University M.L.S., Ed.D., Northern Illinois University, associate professor
 Kathleen M. Ladell, M.A. & M.L.S., Indiana University, assistant professor
 T. J. Lusher, Ed.D., Northern Illinois University, M.L.I.S., University of Iowa, M.A., Iowa State University, associate professor
 Beth McGowan, Ph.D., University of Pennsylvania, M.L.I.S., University of Wisconsin, associate professor
 Sarah McHone-Chase, M.S.L.I.S., University of Illinois, M.A., Illinois State University, associate professor
 James Millhorn, M.A.L.S., University of Iowa, M.A., University of Oklahoma, associate professor
 Nestor L. Osorio, M.A. & M.L.S., State University of New York, Geneseo, professor
 Junlin Pan, M.A.L.S. & Ph.D., University of Arizona, M.S., Southwest Missouri State University, professor
 Hao Phan, M.A., Northern Illinois University, M.L.I.S., University of California, Los Angeles, associate professor
 Robert B. Marks Ridinger, M.L.S., University of Pittsburgh, M.A., Case Western Reserve University, professor
 Leanne VandeCreek, M.L. S., Catholic University, M.S.W., Fordham University, Tarrytown, associate professor

University Press

Founded in 1965, the Northern Illinois University Press publishes scholarly monographs and books of general interest. 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 almost 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 innovative partnerships. 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 203 - Rhetoric and Composition II, Researched Writing in the Domains	C1 901R
ENGL 204 - Rhetoric and Composition Accelerated Researched Writing in the Domains	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
BIOS 208 - Fundamentals of Cellular Biology	L1 910L
BIOS 209 - Fundamentals of Organismal Biology	L1 910L
BIOS 210 - Fundamentals of Cellular Biology Laboratory	L1 910L
BIOS 211 - Fundamentals of Organismal Biology Laboratory	L1 910L
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 - Weather, Climate, and You	P1 905
GEOG 105 - Weather, Climate, and You, and GEOG 106 - Weather and Climate Laboratory	P1 905L
GEOL 103 - Planetary and Space Science	P1 905
GEOL 104 - Introduction to Ocean Science	P1 905
GEOL 105 - Geologic Resources and the Environment	P1 908
GEOL 120 - Planet Earth	P1 907
GEOL 203 - Global Change	P1 906
PHYS 150 - Physics	P1 900
PHYS 151 - Physics Laboratory	P1 900L
PHYS 162 - Elementary Astronomy	P1 906
PHYS 180 - Acoustics, Music, and Hearing	P1 901
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 - Introduction to Arts of the East	F2 903N
ENGL 110 - Literature and Popular Culture	H3 901
ENGL 115 - British Identities, British Literature	H3 912
ENGL 116 - American Identities, American Literature	H3 914
ENGL 310 - Ideas and Ideals in World Literature	H3 906
ENGL 315 - Readings in Shakespeare	H3 905
FLCL 271 - Classical Mythology	H9 901
FLFR 371 - Masterpieces of French Literature in Translation	H3 909

FLRU 361 - Russian Culture and Literature	H3 909
HIST 110 - History of the Western World I: Problems in the Human Past	H2 901
HIST 111 - Western Civilization: 1500-1815	H2 902
HIST 112 - History of the Western World II: Problems in the Human Past	H2 902
IDSP 225 - Introduction to Medieval Society and Culture	HF 902
IDSP 290 - Drama Into Film	F2 908
MUHL 220 - Introduction to Western Musical Traditions	F1 900
PHIL 101 - Introduction to Philosophy	H4 900
PHIL 103 - Contemporary Issues in Ethics	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
<i>Social and Behavioral Sciences</i>	
ANTH 102 - Rise of Civilization	S1 903
ANTH 120 - Anthropology and Human Diversity	S1 900N
ANTH 210 - Exploring Archaeology	S1 903
ANTH 220 - Introduction to Cultural Anthropology	S1 901N
ANTH 240 - Becoming Human: Discovering Human Origins	S1 902
ECON 260 - Principles of Microeconomics	S3 902
ECON 261 - Principles of Macroeconomics	S3 901
GEOG 202 - World Regional Geography	S4 906
GEOG 204 - Geography of Economic Activities	S4 903N
HDFS 230 - Child Development	S6 903
HDFS 280 - Human Development, the Family, and Society	S6 902
HDFS 284 - Introduction to Family Relationships	S7 902
HIST 140 - Asia to 1500	S2 908N
HIST 141 - Asia Since 1500	S2 909N
HIST 170 - World History II: Problems in the Human Past	S2 912N
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

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Legal Notices

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

Student Responsibility for Obtaining Current University Information

The university reserves the right to make changes in admission requirements, fees, degree requirements, and other specifications set forth in this catalog. Such changes take precedence over catalog statements. While reasonable effort is made to publicize such changes, students should remain in close touch with departmental advisers and appropriate offices, because responsibility for complying with all applicable requirements ultimately rests with the student.

Human Rights Statement

Northern Illinois University is an equal opportunity/affirmative action institution and does not discriminate on the basis of race, color, religion, sex, age, marital status, national origin, disability, status based on the Victims' Economic Security and Safety Act (VESSA), or status as a disabled veteran or Vietnam-era veteran, or any other factor unrelated to professional qualifications, in employment or in admission or access to, treatment in, or operation of its educational programs and activities. Such discrimination is prohibited by Titles VI and VII of the Civil Rights Act, Title IX of the Education Amendments, Sections 503 and 504 of the Rehabilitation Act of 1974, the Age Discrimination Acts of 1974 and 1975, the Vietnam-Era Veterans' Readjustment Assistance Act of 1974, Titles I-VI of the Victims' Economic Security and Safety Act, and other federal and state statutes and regulations. Inquiries concerning application of Title IX, Section 504, and other statutes and regulations may be referred to the Affirmative Action and Diversity Resources Center, 1515 W. Lincoln Highway, DeKalb, IL 60115, telephone 815-753-1118, or to the director of the Office of Civil Rights, U.S. Department of Education, Washington, D.C. 20024. The Constitution and Bylaws of Northern Illinois University afford equal treatment regardless of political views or affiliation, sexual orientation, or other factor unrelated to scholarly or professional performance (Constitution Article 9, Section 9.2; Bylaws Article 5, Section 5.211; Bylaws Article 7, Section 7.25 and Section 7.252; Bylaws Article 10; and Bylaws Article 18).

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 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 Student Conduct.

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 Student Conduct, 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

- Abbreviations used in this catalog, 8
- Absence from classes (attendance), 80
- Academic Advising Center, 71
- Academic awards and scholarships, 87
- Academic calendar, 4-6
- Academic dismissal, 8
 - See also Academic probation and dismissal, 76
- Academic honors. See Degrees with Distinction, 67
 - See also Honors Program and individual departments
- Academic integrity, 81
- Academic load, 79
- Academic policies. See Academic regulations
- Academic probation and dismissal, 76
 - and reinstatement, 23-24
- Academic programs
 - graduate, 418-421
 - normal time for completion, 29
 - undergraduate, 13-16
 - See also Major, Minor, and individual colleges and departments
- Academic progress for financial aid, 85-86
- Academic records, 81
- Academic regulations, 71-82
- Academic schedule and religious observances, 81
- Academic Success. See Student Academic Success, Office of
- Academic year, 12
 - calendar, 4-6
- Accelerated programs
 - B.A./J.D. program in art history and law, 384
 - B.A./J.D. program in world languages and cultures and law, 368
 - B.A. or B.S./J.D. program in English, 285
 - B.A. or B.S./J.D. program in history and the College of Law, 314
 - B.A. or B.S./J.D. program in philosophy and the College of Law, 332
 - B.A. or B.S./J.D. program in political science and the College of Law, 343
 - B.A. or B.S./J.D. program in sociology and the College of Law, 357
 - B.A. or B.S./M.A. program in sociology, 357
 - B.A. or B.S./M.P.A. program in political science and public administration, 344
 - B.S. in kinesiology/M.S. in athletic training, 140
 - B.S. in marketing/M.S. in digital marketing, 112
 - B.S. in rehabilitation and disability services/M.S. in rehabilitation counseling, 215-216
 - B.S./J.D. in business administration and B.S./J.D. in management and the College of Law, 106-107
 - B.S./J.D. in engineering or engineering technology and the College of Law, 160
 - B.S./M.A. program in economics, 278
 - B.S./M.P.H. program in public health, 208-209
 - B.S./M.S. program in mathematical sciences, 325
 - B.S. or B.A./J.D. program in political science and the College of Law, 343
 - B.S. or B.A./M.A. program in political science, 343
 - electrical engineering, 162
 - industrial and systems engineering, 170
 - mechanical engineering, 174
- ACCESS tutoring programs, 89
- Accommodations for students with disabilities, 80-81
- Accountancy, Department of, 97-100
 - courses, 98-100
 - internship, 98
 - major, 97
 - professional examination preparation, 94
- Accreditation, 11
- Accredited institution, definition of, 8, 11
- ACT scores, 18
 - See also Admission criteria
- Acting,
 - admission to emphasis, 25
 - emphasis, 404
- Activity fee, 83
- Actuarial Science, Statistics and, Department of, 362-365
 - courses, 363-364
 - major, 362-363
 - minor, 363
- Add/drop, 8, 73
- Admission, 17-24
 - alternate admission, 22
 - application procedure, 17-18
 - criteria, 18-22
 - early admission to the Graduate School, 422
 - freshmen, 18-20
 - limited admissions, 25-28
 - special, 23
 - sponsored, 22
 - to educator licensure, 68
 - See also individual programs
 - to Honors Program, 15
 - to major programs, 18, 69
 - transfer students, 20-21
 - visiting students, 23
- Adolescence, certificate, 411
- Advanced computing and simulation, emphasis, 175
- Advanced placement, 76
- Advisement, 71
 - College offices, 71
 - in College of Engineering and Engineering Technology, 159
 - in College of Health and Human Sciences, 189
 - in College of Liberal Arts and Sciences, 226
 - for pre-professional students, 239
- Advocacy and public communication, emphasis, 264-265
- Affirmative action (Human Rights Statement), 427
- Aging (gerontology), minor, 198-199
- Aid, financial, 85-87
 - and withdrawal from university, 73-74
- Air force ROTC, 220
- Allied Health and Communicative Disorders, School of, 192-193
 - courses, 192-193
- Alternate admission to the university, 22
- American College Test. See ACT test scores
- American government and politics courses (Political Science), 345
- American Sign Language (ASL) courses, 376-377
- Annual Security Report, 427
- Anthropology, Department of, 244-250
 - courses, 246-250
 - degree with honors, 246
 - educator licensure, 245-246
 - major, 244-245
 - minor, 246

- Apostille fee, 83
- Apparel, textiles and merchandising
 - See textiles, apparel, and merchandising
- Appeal,
 - of grade, 75
 - procedure regarding financial aid, 86
- Application
 - deadlines for admission, 17-18
 - declaring major, 71-72
 - for admission, 17-18
 - for financial aid, 85
 - for graduation, 67
 - schedule for application review, 19
- Applied Ethics, certificate, 411
- Applied management, major,
 - in Educational Technology, Research and Assessment, 135
 - in School of Public and Global Affairs, 243
- Applied manufacturing technology,
 - admission to emphasis, 25
 - emphasis, 183
- Applied mathematics,
 - emphasis, 322-323
 - minor option, 325
- Applied physics, emphasis, 336
- Arabic language courses, 377
- Archives, university (Regional History Center), 416
- Army ROTC, 218-219
- Art,
 - foundations and general courses, 385
 - major, 382-383
 - minor, 384
 - studio major, 383-384
- Art and design education,
 - admission to, 25
 - courses, 387-388
 - major, 381-382
- Art and Design, School of, 381-391
 - degree with honors, 382
- Art history
 - accelerated B.A./J.D. in art history and the College of Law, 384
 - courses, 388-389
 - major, 382
 - minor, 385
- Art studio and design
 - courses, 389-391
 - major, 383-384
- Art studio, emphasis, 383-384
- Asian American Resource Center, 89
- Asian American Studies, certificate, 235-236
- Asian language courses, 377-378
- Asian, Southeast, studies
 - Center for, 415-416
 - courses, 241
 - minor, 233-234
- ASL courses, 376-377
- Assessment, 16
- Assessment and research, courses, 137
- Athletic training
 - admission to major, 25-26
 - major, 139
- Athletics, recreational, 91-92
- Attendance, 80
- Attorneys (Students' Legal Assistance Office), 92
- Auditing courses, 8, 80

- Baccalaureate degrees
 - defined, 8
 - majors, 13-14
 - second, 66
- Baccalaureate experience, 13
- Bachelor of Arts (B.A.) degree, language requirement for, 66-67
- Bachelor of General Studies (B.G.S.) degree, in College of Liberal Arts and Sciences, 229
- Bachelor of Science (B.S.) degree, special requirement for in College of Liberal Arts and Sciences, 227-228
- Band instruments. See Instrumental music
- Bilingual/ESL
 - courses, 131
 - emphasis, 128
- Biliteracy, State Seal of, 75
- Biochemistry, emphasis, 258-259
- Biochemistry, Department of Chemistry and, 250-255
- Biodiversity and environmental restoration, emphasis, 291-292
- Biological Sciences, Department of, 251-257
 - courses, 252-257
 - degree with honors, 252
 - educator licensure, 251-252
 - major, 251
 - minor, 252
- Biomedical, pre-professional students course selection, 239
- Biomedical engineering,
 - courses in, 164-165
 - major, 163
 - minor, 164
- Black studies
 - Center for, 415
 - courses, 413
 - minor, 415
- Board of Trustees, 426
- B.S. completion programs. See Completion programs
- B.S./M.S. integrated sequence, See industrial and systems engineering
- Burma Studies, Center for, 415
- Burmese language courses, 377
- Business administration
 - accelerated B.S./J.D. program, 106
 - courses, 95-94, 108
 - major, 106
 - minor, 95
- Business analytics, minor, 119
- Business Analytics Using SAS Software - SAS Joint Certificate Program, 120
- Business, College of, 94-96
 - interdisciplinary courses, 95-96
- Business innovation and entrepreneurship, minor, 107
- Business management, school, courses, 150

- Calendar, 4-6
- Campus, 11-12
- Campus Child Care, See Child Development and Family Center
- Campus living, 88
- Campus, parking, 91
- Campus recreation, See Recreation Services
- Campus transportation, 89
- Career Compass, College of Business, 94
- Career Services, 89
- Cars on campus (parking), 91
- Catalog, choice of, for graduation requirements, 67
- Center, Asian American, 87
- Center, Gender and Sexuality Resource, 90
- Center for Black Studies, 415
- Center for Burma Studies, 415
- Center for Latino and Latin American Studies, 415
- Center for Non-Profit and NGO Studies (NNGO), 329-331
- Center for Southeast Asian Studies, 415-416
- Center, Latino Resource, 90
- Ceramics (art and studio design), 384
- Certificate of undergraduate study, 8, 72
 - list of, 72
- Certificates of graduate study, 421
- Certification, teacher. See Educator licensure
- Certified Internal Auditor (C.I.A.) examination preparation, 98

- Certified Management Account (C.M.A.) examination preparation, 98
- Certified Public Accountant (C.P.A.) examination preparation, 98
- Certified Treasury Professional (C.T.P.) and Certified Treasury Professional Associate (C.T.P.A.) preparation, 103
- C.F.A. (Chartered Financial Analyst Preparation) examination preparation, 102
- CHANCE Program, 22
- Change of grade, 75-76
- Change of major or minor, 71-72
 - regarding financial aid, 86
- Change of schedule, 72-73
- Chartered Financial Analyst (C.F.A.) preparation, 102
- Chemistry,
 - courses, 260-263
 - degree with honors, 260
 - educator licensure, 259-260
 - emphasis, 258
 - major, 258-259
 - minor, 260
 - for pre-professional students, emphasis, 259
 - secondary teaching, emphasis, 259
- Chemistry and Biochemistry, Department of, 258-263
 - courses, 260-263
 - educator licensure, 259-260
- Chemistry placement examination policy, 258
- Child Care, *See* Child Development and Family Center
- Child development, emphasis, 196-197
- Child Development and Family Center, 92
- Child studies, family and, minor, 198
- Childhood education, early, major, 151
- Chinese language courses, 377
- Chinese studies, minor option, 368
- Choice of catalog for graduation requirements, 67
- C.I.A. examination preparation, 98
- Civic Engagement, *See* Community leadership and civic engagement
- Classical languages courses (Foreign Languages and Literatures), 375
- Classical studies, minor, 229
- Classification of students, 79
- Class load, 79
- Classroom disruption, 81-82
- CLEP (College Level Examination Program), 76
- Clinical and practicum assignments,
 - in College of Health and Human Sciences, 189
- Clothing, *See* Textiles, apparel, and merchandising
- C.M.A. examination preparation, 98
- Coaching, minor, 141
- Cognitive studies, minor, 229-230
- College advising offices, 71
- College Board Advanced Placement Program, 76
- College Level Examination Program (CLEP), 76
- Combined degree program in physics and engineering, 240
- Communication, Department of, 264-272
- Communication, visual (art). *See* Visual communication
- Communication studies
 - courses, 268-270
 - degree with honors, 266
 - major, 264-266
 - minor, 267
- Communicative disorders,
 - courses, 192-193
 - major, 192
 - minor, 192
- Communicative Disorders, Allied Health and, School of, 192-193
 - courses, 192-193
- Community colleges,
 - credit from, 78
 - transfer or reentrance from, 20-21, 23,
- Community Counseling Training Center, 92
- Compact benefits. *See* Illinois public community college graduates
- Comparative literature, minor, 230
- Comparative politics courses (Political Science), 347
- Competency examination, definition of, 8
- Completion of academic program, normal time, 29
- Composition (music),
 - courses, 395-396
 - emphasis, 394
- Computational mathematics, emphasis, 323
- Computational software, emphasis, 273
- Computer Science, Department of, 273-276
 - admission to major, 26
 - courses, 274-276
 - major, 273-274
 - minor, 274
- Computing services (information technology), 90
- Concentrations, graduate, 421
- Concentration, medieval studies, 235
- Concurrent enrollment, 8, 79
- Conduct and discipline regulations, 72, 429
- Conflict of interest policy, 427
- Contract major
 - in College of Education, 123-124
 - in College of Engineering and Engineering Technology, 159
 - in College of Health and Human Sciences, 190
 - in College of Liberal Arts and Sciences, 228
 - in College of Visual and Performing Arts, 380
- Corequisite (CRQ), 8, 48
 - and student responsibility, 48
- Corporate communication, emphasis, 265-266
- Counseling and Higher Education, Department of, 125-126
 - courses, 125-126
- Counseling and Consultation Services, 89-90
- Counseling, courses, 125
- Couple and Family Therapy Clinic, 92
- Course audit, 80
- Course designators, 7
- Course load, 79
- Course offerings, 49
 - See also* individual departments
- Course, repeating, 75
- Course selection, 79
- C.P.A. examination preparation, 98
- Creative Writing, certificate, 285-286
- Creativity and critical analysis general education course descriptions, 52-55
- Creativity, Innovation, and Change, Pathway, 63
- Credit, academic
 - by examination, 8, 76-77
 - from community colleges, 78
 - grades, 74
 - required for graduation, 29
 - transfer. *See* Transfer credit
- Criminal background check, educator licensure, 70
- Criminology, certificate, 358
- Crosslisted courses (X designator), 7
- C.T.P. and C.T.P.A. examination preparation, 103
- Culturally Relevant Teaching, certificate, 124
- Curriculum and Instruction, Department of, 127-134
 - courses, 133
- Dance education, courses, 141-142
- Dance performance,
 - courses, 408-409
 - major, 404-405
 - minor, 405
- DANTES (Defense Activities for Non-Traditional Educational Support), 76
- Deaf studies, minor option, 368-369
- Deafness, minor, 216

- Dean's List
 - in College of Business, 95
 - in College of Education, 124
 - in College of Engineering and Engineering Technology, 160
 - in College of Health and Human Sciences, 189
 - in College of Liberal Arts and Sciences, 229
 - in College of Visual and Performing Arts, 380
- Declaration of major or minor, 71-72
- Defense Activities for Non-traditional Educational Support (DANTES), 76
- Definition of terms used in this catalog, 8-9
- Degree affiliation agreement NIU/UIC College of Pharmacy, 238
- Degree completion, emphasis in health studies, 215
- Degree,
 - declaration of, 71-72
 - second degree, 66
- Degree requirements, 29-65
- Degrees offered, graduate, 418-421
- Degrees offered, undergraduate, 13-14
 - in College of Business, 94
 - in College of Education, 123
 - in College of Engineering and Engineering Technology, 159
 - in College of Health and Human Sciences, 189
 - in College of Liberal Arts and Sciences, 226
 - in College of Visual and Performing Arts, 380
- Degrees with distinction, 67
 - in Honors Program, 15
 - See also individual departments
- Dentistry (pre-dentistry), 239
- Departmental requirements, definition of, 8
- Department-sponsored admission, 22
- Design and media arts,
 - courses, 385-387
 - emphasis, 383
- Design and technology (theatre arts),
 - admission to emphasis, 26
 - emphasis, 404
- Dietetics. See Nutrition, dietetics, and wellness
- Digital fabrication (art studio and design), 384
- Digital Marketing, certificate, 113
- Digital Media Production, certificate, 267-268
- Dining. See housing and dining
- Direct reentrance, 23
- Disabilities
 - accommodations for students with, 80-81
 - learning behavior specialist I, emphasis (special education), 153
 - services for students with. See Disability Resource Center
- Disability Resource Center, 90
- Discipline regulations, 71, 429
- Dismissal. See Academic probation and dismissal
- Disruption, academic, 81-82
- Distinction, degrees with, 67
 - in Honors Program, 14-16
 - See also individual departments
- Doctoral degrees, 418-421
- Dormitories, 88
 - rates for, 83
- Double emphasis, 66
- Double major, 66
- Drama. See English, Department of, and Theatre and Dance, School of
- Drawing (art studio and design), 384
- Dropping a class, 8, 73
- Early admission to the Graduate School, 422
- Early childhood education,
 - courses, 154-155
 - major, 151
 - Professional Educator License with Early Childhood Education Endorsement and preschool special education approval, 151-152
- Earth and space science education, emphasis, 308
- Economics, Department of, 277-281
 - accelerated B.S./J.D. program, 278
 - courses, 279-281
 - degree with honors, 278
 - educator licensure, 277-278
 - major, 277
 - minor, 279
- Education, College of, 123-124
 - interdisciplinary courses, 124
- Education, professional requirements in. See Educator Licensure Requirements
- Educational administration courses, 149
- Educational Psychology, See Leadership, Educational Psychology and Foundations
- Educational psychology courses, 149
- Educational Services and Programs, 22
- Educational Technology, Research and Assessment, Department of, 135-137
 - courses, 137
- Educator Licensure and preparation, courses, 414
- Educator Licensure Requirements, 68-70
 - See also individual colleges and departments
 - admission to, 68
 - state requirements for, 123
 - university requirements for, 69
- eLearning Design, certificate, 135-136
- Elective, definition of, 8
- Electrical Engineering, Department of, 162-167
 - accelerated B.S./M.S. sequence, 162
 - courses, 165-167
 - major, 163-164
 - minor, 164
- Electrical engineering technology, emphasis, 180-181
- Elementary education,
 - courses, 133-134
 - degree with honors, 128-129
 - major, 127-129
- Elementary mathematics education,
 - emphasis, 128
 - minor, 325
- Eligibility requirements, for financial aid, 85
- Emphasis, 8
 - second emphasis, 66
- Empirical theory and behavior courses (Political Science), 346
- Employee Conflict of Interest, 427
- Employee leaves of absence, 427
- Employment, student, 87
- Encumbrances, 8, 81
- Endorsement, 8
- Energy and environmental technology, emphasis, 182-183
- Energy Management, certificate, 183
- Energy studies, emphasis, 292
- Engagement and Experiential Learning, Student, Office of, 91
- Engineering and Engineering Technology, College of, 159-161
 - accelerated B.S./J.D. program, 160
 - interdisciplinary courses, 160-161
- Engineering management, emphasis, 170
- Engineering/physics combined degree program, 240
- English, Department of, 282-290
 - accelerated B.A./J.D. program, 285
 - courses, 286-289
 - degree with honors, 285
 - major, 282-285
 - minor, 285
- English language arts licensure, courses, 287-288
- English proficiency in the classroom, oral, 82
- Enrollment
 - certification fee, 83
 - concurrent, 79
- Ensemble courses (music), 400-401

- Enterprise Management Using SAP Software, certificate, 119-120
- Enterprise software, emphasis, 273
- Entrance. *See* Admission
- Entrepreneurship and social responsibility, emphasis, 106
- Environment and health, emphasis, 208
- Environmental geosciences, emphasis, 307-308
- Environmental management systems, courses, 414
- Environmental policy, emphasis, 293-294
- Environmental restoration, biodiversity and, emphasis, 282-283
- Environmental science, educator licensure, 283-284
- Environmental studies, 291-298
 - courses, 296-298
 - educator licensure, emphasis, 295
 - major, 291-295
 - minor, 295-296
- ESL/Bilingual,
 - courses, 131
 - emphasis, 128
- Evaluation for financial aid, 86
- Exceptions, fees, 84
- Expenses, 83-84
- Experiential Learning, Student Engagement and, Office of, 91
- External education, in the College of Liberal Arts and Sciences, 240
- External programming. *See* Regional programs
- External Scholarships. *See* Scholarships
- Facilities Management, certificate, 183
- Faculty. *See* individual departments
- Faculty office hours, 12
- Family and child studies, minor, 198
- Family and Consumer Sciences, School of, 194-204
 - courses, 199-200
 - general minor, 198
- Family and individual development, emphasis, 194-195
- Family social services, emphasis, 195-196
- Fashion merchandising
 - courses, 200-201
 - major, 197
 - minor, 198
- Federal assistance, 86-87
- Fees, 83
 - and registration, 83
 - coverage, 83
 - exceptions, 84
 - payment of, 84
 - regional courses, 83
 - special, 83
- Fiber (art and studio design), 384
- Field Campus, Lorado Taft, 93
- Film. *See* Media studies
- Film and Television Studies, certificate, 236
- Finance, Department of, 101-104
 - certificate, 102
 - C.F.A. preparation, 102
 - courses, 103-104
 - C.T.P. and C.T.P.A. preparation, 103
 - internships, 102
 - major, 101-102
 - minor, 102
- Financial aid, 85-87
 - and withdrawal from university, 73-74
 - eligibility requirements and general application procedures, 85
 - evaluation, 86
 - office of, 85
- Financial Aid and Scholarships, 85-87
 - office of, 85
- Financial economics, emphasis, 277
- Financial responsibility, 84
- Food (meal plans). *See* Housing and Dining
- Foreign language requirements for B.A., 66-67
- Foreign language residence program, College of Liberal Arts and Sciences, 240
- Foreign students. *See* International students
- Foreign study, 416-417
 - in history, 315
- Forfeiture of transfer credit, 78-79
- Former NIU students, readmission, 23
- Foundational studies, general education, 50-51
- Foundations of education, *See* Leadership, Educational Psychology and Foundations
- Foundations of education courses, 149-150
- Foundations of Educational and Policy Studies, certificate, 148
- French
 - courses, 370-371
- French and Francophone studies,
 - emphasis, 366
 - minor option, 369
- Freshmen
 - academic probation, 76
 - admission of, 18-20
 - and catalog choice, 67
 - dismissal, 76
 - Warning, 76
- Gay, Lesbian, Bisexual, Transgender Resource Center.
 - See* Gender and Sexuality Resource Center
- Gender and Sexuality Resource Center, 90
- Gender Studies. *See* Women, Gender, and Sexuality Studies
- General education
 - course descriptions, 50-61
 - course titles, 61-63
 - foundational studies, 50-51
 - framework, 50
 - knowledge domain requirements, 51-63
 - Pathways, 63-65
 - requirements, 49-65
- General public health, emphasis, 207
- General regulations, 429-430
- General studies. *See* Bachelor of General Studies (B.G.S.) degree
- Geographic and Atmospheric Sciences, Department of, 299-306
- Geographic Information Systems, certificate, 301-302
- Geography,
 - courses, 302-305
 - degree with honors, 301
 - educator licensure, 301
 - emphasis, 299-300
 - major, 299-300
 - minor, 301
- Geology, emphasis, 307
- Geology and Environmental Geosciences, Department of, 307-313
 - courses, 309-313
 - degree with honors, 309
 - major, 307-308
 - minor, 309
 - educator licensure, 308-309
- Geomatics, emphasis, 300
- German studies,
 - courses, 374-375
 - emphasis, 366-367
 - minor option, 369
- Gerontology,
 - courses, 190
 - minor, 198-199
- GLBT Studies. *See* LGBT Studies
- Global Connections, Pathways, 63-64
- Global studies, minor, 230-231
- Government and politics, American, courses, 345
- GPA. *See* grade point average
- GPA hours, defined, 8

- Grade, change of, 75-76
- Grade appeals, 75
- Grade minimum, state requirements for educator licensure, 118
- Grade point average (GPA)
 - computation of, 74-75
 - definition of, 8
 - in major, 48
 - in minor, 66
 - for satisfactory academic progress, 86
 - required for graduation, 48
- Grades, 74
- Grading policy, multisection courses, Liberal Arts and Sciences, 227
- Grading system, 74-76
- Graduate concentrations, 421
- Graduate courses
 - not available to postbaccalaureates, 21-22
 - undergraduates in, 77
- Graduate degrees, 418-421
- Graduate School, 418-421
 - early admission to, 422
 - student-at-large classification, 421-422
- Graduate students in undergraduate courses, 80
- Graduate study, certificates of, 421
- Graduation
 - application for, 67
 - choice of catalog for, 67
 - fee for, 83
 - requirements for, 29-67, 66-67
- Grants, 86-87
- Greek language courses, 375
- Guide to Reading this Catalog, 7-9

- Half-session courses, definition of, 8
- Health administration, emphasis, 207-208
- Health and Human Sciences, College of, 189-191
 - interdisciplinary courses, 191-192
- Health and Wellness, Pathway, 64
- Health education,
 - courses, 212-213
 - minor, 209
- Health, environment and, emphasis, 208
- Health insurance, student, 88
- Health promotion, emphasis, 208
- Health Services, 88
- Health sciences,
 - admission to, 26
 - courses, 216
 - general emphasis, 214-215
 - major, 214-215
- Health Studies, School of, 205-213
 - courses, 210-211
- Health systems engineering, emphasis, 169
- Hearing impaired students (Speech-Language-Hearing Clinic), 89
- High school preparation for college entrance, 19
- Higher education and student affairs, courses, 125
- History, Department of, 314-321
 - accelerated B.A. or B.S./J.D. program in History and the College of Law, 314
 - courses, 315-321
 - educator licensure, 314-315
 - honors program, 315
 - major, 314
 - minor in, 315
- History Center, Regional, 416
- Hold (encumbrance), 8, 81
- Holmes Student Center, 88
- Home economics. *See* Family and Consumer Sciences, School of
- Homeland Security, certificate, 411-412
- Honors program, 14-16
 - Degrees with distinction, 67
 - See also* individual colleges and departments
- Honors courses, defined, 8
- Honors Program, 14-15
- Honors work, departmental. *See* individual departments
- Hospitality and tourism management,
 - courses, 203-204
 - major, 197-198
- Hour,
 - faculty office, 12
 - semester, definition of, 9
 - university, 12
- Housing and Dining, 88
 - rates for, 83
- Human development and family sciences,
 - courses, 201-203
 - major, 194-197
- Human diversity requirement, 29
 - course list, 44-49
- Human resource management, emphasis, 106
- Human rights statement, 427

- ID/activity card, lost or replacement, fee for, 83
- IELTS, 21
- Illinois Articulation Initiative Core Curriculum, 424-425
- Illinois Community or Junior Colleges, transfer students, 21
- Illinois Director Credential Certificate-Level 2, certificate, 199
- Illinois Licensure Testing System (ILTS), 123
- Illinois public community college graduates, 20-21
 - See also* Transfer credit
 - and reentrance, 23
- Illinois residence regulations, 84
- Illinois State assistance, 87
- Illinois educator licensure. *See* Educator Licensure Requirements
- Illustration (art studio and design), 384
- ILTS Test of Academic Proficiency, 123
- Immigration Reform and Control Act regulations, 427
- Immunization policy, 18
- Inclusive Teaching Practices, certificate, 154
- Incompletes, 8, 75
- Indonesian language courses, 377
- Industrial and Systems Engineering, Department of, 168-173
 - accelerated sequence, 170
 - courses, 171-173
 - major, 168-170
- Industrial management and technology, emphasis, 181-182
- Infant Toddler Credential Certificate-Level 5, certificate, 199
- Information Systems, certificate, 120
- Information Systems, Department of Operations Management and, 118-122
- Information Systems, certificate, 120
- Information Technology, 90
- In-state students, definition of, 84
- Institutional aid (scholarships), 87
- Instructional technology courses, 136
- Instructional technology, training and evaluation, emphasis within the B.S. in applied management, 135
- Instrumental music
 - music education, 392
 - performance, 393-394
- Insurance, student health, 88
 - refund of fee for, 80
- Integrated programs
 - minor in marketing/M.S. in digital marketing, 113
 - certificate in digital marketing/M.S. in digital marketing, 113-114
 - certificate in professional selling/M.S. in digital marketing, 114
 - certificate in retail management/M.S. in digital marketing, 115
- Integrity, academic, 81
- Inter-College and University-Wide Interdisciplinary Courses, 413-414
- Inter-College Interdisciplinary Certificates and Programs, 411-412
- Interdisciplinary certificates, 411-412

- Interdisciplinary concentration, medieval studies, 235
- Interdisciplinary courses, general, 413-414
- Interdisciplinary Health Professions, School of, 214-217
 - courses, 217
- International Affairs, 416-418
- International Baccalaureate (IB), 76
- International English Language Testing System (IELTS), 21
- International marketing, minor in, 112
- International politics, emphasis, 341-342
- International relations courses (Political Science), 347
- International Student and Scholar Services, 418
- International students
 - and admission, 21
 - residence regulations, 84
- International Training Office, 418
- Internships, 80
 - See also other individual colleges and departments
- Introduction to NIU, 10-12
- Italian
 - courses, 371-372
 - minor option, 369
- Japanese language courses, 376
- Japanese studies, minor option, 369
- Jazz studies, performance, 394
- Jewelry (art studio and design), 384
- Journalism
 - courses, 270-272
 - degree with honors, 267
 - major, 266-267
 - minor, 267
- Junior colleges. See Community colleges
- Justice and democracy: The American experiment,
 - emphasis, 342
- Keyboard (music), performance, 393
- Khmer courses, 377
- Kinesiology and Physical Education, Department of, 138-147
 - courses, 142-146
 - minor, 140-141
- Kinesiology,
 - accelerated B.S. in kinesiology/M.S. in Athletic Training, 140
 - major, 139-140
- Knowledge domain requirements and course descriptions,
 - general education, 51-63
- Language. See English and Foreign Languages and Literatures, Departments of
- Language and linguistics courses (English), 287
- Language arts courses, 131-132
- Language requirement for Bachelor of Arts degree, 66-67
- Late payment fee, 84
- Latin language courses, 375
- Latino and Latin American studies
 - Center for, 415
 - courses, 241
 - minor, 231-232
- Latino Resource Center, 90
- Law, College of, 418
- Law (pre-law), 239
- Law, public (political science),
 - courses, 345
 - emphasis, 340-341
- Leadership and management, emphasis, 105
- Leadership, Educational Psychology and Foundations, Department of, 148-150
- Leadership in Aging Services, certificate, 199
- Lean Six Sigma, certificate, 170-171
- Learning, Pathway, 64
- Learning behavior specialist I, (special education), emphasis, 153
- Leaves of absence for employees, 427
 - in College of Health and Human Sciences, 189
- Legal assistance, student, 92
- Legal Notices, 427-430
- Lesbian, Gay, Bisexual, Transgender Resource Center.
 - See Gender and Sexuality Resource Center
- Lesbian, Gay, Bisexual, and Transgender Studies,
 - certificate, 236
 - courses, See Women's, Gender, and Sexuality Studies courses
- LGBTQ+, minor, 232
- LGBTQ+ studies, minor, 232
- Liberal Arts and Sciences, College of, 226-242
 - college requirements for B.S. degree, 227-228
 - college requirements for minors, 228
 - interdisciplinary courses, 240-242
 - requirements for the B.G.S. degree, 229
- Libraries, University, 422
- Licensure, educator requirements, 68-70
- Licensure in English Language Arts courses, 287-288
- Limited admissions, 25-28
 - in acting emphasis, 25
 - in applied manufacturing technology emphasis, 25
 - in art studio and design, 25
 - in athletic training major, 25-26
 - in computer science major, 26
 - in design and technology emphasis, 26
 - in health science degree completion emphasis, 26
 - in medical laboratory sciences major, 26-27
 - in music majors, 27
 - in nursing, 27-28
 - in visual communication area of study, 28
 - requirements, 25
- Limited retention, 28
 - See also individual colleges and departments
- Linguistics, minor, 232-233
- Linguistics courses (English), 287
- Literacy Clinic Services, 124
- Literacy, courses, 131
- Literature, comparative, minor, 203
- Literature courses (English), 288-289
- Living on campus, See Housing and Dining
- Load, class, 79
- Loans, 86-87
- Logistics, certificate, 171
- Lorado Taft Field Campus, 99
- Lost identification card fee, 83
- Major, 29
 - admission to, 18, 71-72
 - change of, 71-72, 86
 - declaration of, 71-72
 - definition of, 9
 - programs available, 13-14
 - requirements, 29
 - second, 66
 - See also individual colleges and departments
- Management, Department of, 105-110
 - accelerated B.S./J.D. program, 108-109
 - courses, 108-110
 - internship, 107
 - major, 105-106
- Management, operations. See Operations Management and Information Systems, Department of
- Manufacturing systems, emphasis, 169
- Manufacturing engineering technology, emphasis, 181
- Marketing, Department of, 111, 117
 - courses, 115-116
 - internship, 113
 - major, 112
 - minor, 112-113
- Master's degrees, 418-421

- Mathematical Sciences, Department of, 322-328
 - accelerated B.S./M.S. program in mathematical sciences, 325
 - courses, 325-328
 - degree with honors, 324
 - general emphasis, 322
 - major, 322-324
 - minor, 325
- Mathematics education,
 - emphasis, 323-324
 - minor option, 325
 - elementary, minor, 325
- Mathematics placement and proficiency examination policies, 322
- Maximum time frame, for satisfactory academic progress, 86
- Meal plans. *See* Housing and Dining
- Mechanical Engineering, Department of, 174-179
 - accelerated sequence, 174
 - courses, 177-179
 - major, 175-176
 - minor, 176
- Mechatronics and robotics, emphasis, 175-176
- Mechatronics, courses, 176-177
- Mechatronics engineering, major, 176
- Media arts, design and,
 - courses, 385-387
 - emphasis, 383
- Media studies, emphasis, 265
- Medical care, 88
- Medical laboratory sciences,
 - admission to major, 26-27
 - courses, 209-210
 - major, 205-206
- Medicine (pre-medicine), 239
- Medieval studies
 - concentration in, 235
 - courses, 414
- Meningococcal meningitis, 18
- Merchandising, textiles, apparel, and, *See* Textiles, Apparel, and Merchandising
- Metalwork, jewelry design, and digital fabrication (art and studio design), 384
- Meteorology
 - courses, 305-306
 - major, 300
- Middle level teaching and learning,
 - courses, 132-133
 - major, 129-131
- Middle School Literacy, certificate, 131
- Military educational experience credit, 78
- Military Science, Department of, 218-220
 - courses, 219-220
 - courses in transfer, 79
 - minor, 219
- Military and Post-Traditional Student Services, 90
- Minor
 - changes of, 71-72
 - declaration of, 66
 - definition of, 9
 - requirements, 66
- Mission and Scope, Northern Illinois University, 10-11
- Mobile Programming, certificate, 274
- Music history and literature, courses, 394-395
- Music composition, theory and,
 - courses, 395-396
 - emphasis, 394
- Music education,
 - courses, 401-402
 - emphasis, 392-393
- Music ensemble courses, 400-401
- Music performance,
 - courses, 396-400
 - emphasis, 393-394
- Music, School of, 392-402
 - admission to majors, 27
 - courses, 394-402
 - majors, 392-394
- Music theory and composition courses, 395-396
- N grade in transfer credit, 78
- Nanotechnology, certificate, 160
- Nature and society, emphasis, 292-293
- Nature and technology general education course descriptions, 55-57
- New non-immigrant students fee, 83
- Nondegree student, 9
- Non-profit and NGO Studies, Center for, 329-331
 - certificate, 330
 - courses, 330-331
 - major, 329-330
 - minor, 330
- Non-traditional and off-campus student services,
 - See* Military and Post-Traditional Student Services
- Normal time for completion of academic program, 29
- Numbering of courses, 8
- Nursing, School of, 221-225
 - admission to major, 27-28
 - completion program, 221-222
 - courses, 223-225
 - major, 223
 - online R.N.-B.S. courses, 223
- Nutrition, dietetics, and wellness
 - courses, 211-212
 - major, 206-207
- Nutrition, health and wellness, minor, 209
- Off-campus and non-traditional student services,
 - See* Military and Post-Traditional Student Services
- Off-campus courses (regional programs), 92-93
 - special fee for, 83
 - See also* individual departments
- Office hours
 - faculty, 12
 - university, 12
- Officers of the university, 426
- Ombudsperson, 91
- Operations Management and Information Systems, Department of, 118-122
 - courses, 120-122
 - degree with honors, 119
 - internships, 119
 - major, 118-119
- Optometry (pre-optometry), 239
- Oral English proficiency, 82
- Orchestral instruments. *See* Instrumental music
- Organizational/corporate communication, emphasis, 265-266
- Orientation and Enrollment, 91
 - fee for international student orientation, 83
 - for international students, 418
- Origins and Influences, Pathway, 64-65
- Other Academic Units, 415-423
- Other graduation requirements, 66-67
- Out-of-state employment in public schools, 70
- Out-of-state public community college graduates, 21
 - and reentrance, 23
- Outreach delivery fee, 83
- Overload, class, 79
- PACE (Rate of Completion Requirement, for financial aid), 85
- Painting (art studio and design), 384
- Parking, 91
- Part-time student, 9
- Passport to the Business World, College of Business, 94
- Pathways, general education, 63-65

- Payment of fees, 84
- Pell Grant, 86
- Performance,
 - dance,
 - courses, 408-409
 - major, 404-405
 - minor, 405
 - music,
 - courses, 396-400
 - emphasis, 393-394
- Pharmacy
 - degree affiliation, 231
 - pre-pharmacy, 239
- Philosophy, Department of, 332-334
 - accelerated B.A. or B.S./J.D. program, 332
 - degree with honors, 332
 - courses, 332-334
 - major, 332
 - minor, 332
- Philosophy of Education, certificate, 148
- Photography (art studio and design), 383
- Physical Education, and Kinesiology, Department of, 138-147
 - courses, 142-146
 - major, 138-139
- Physical Therapy Clinic, 92
- Physical therapy, courses, 193
- Physics, Department of, 335-339
 - courses, 337-339
 - educator licensure, 335, 336
 - honors program, 337
 - major, 335-336
 - minor, 337
- Physics/engineering combined degree program, 210
- Physics, secondary school teaching, emphasis, 335
- Placement
 - advanced, 76
 - in chemistry, 258
 - in mathematics, 322
- PLUS general education, *See also* general education
- PLUS loan for parents, 86
- Policies, academic, *See* Academic Regulations
- Polish language courses, 375-376
- Political Science, Department of, 340-348
 - accelerated B.A. or B.S./M.P.A. in Political Science and Public Administration, 344
 - accelerated B.S. or B.A./J.D. program with College of Law, 343
 - accelerated B.S. or B.A./M.A. program in Political Science, 343
 - courses, 345-348
 - degree with honors, 344
 - educator licensure, 342-343
 - major, 340-342
 - minor, 344
- Political theory, courses (Political Science), 346-347
- Politics and American government, courses, 345
- Politics and government, emphasis, 340
- Portuguese language courses, 374
- Postbaccalaureate students, 21-22
- Post-traditional student services, 90
- Practicums, 80
 - See also* individual colleges and departments
- Pre-physical therapy, emphasis, 214
- Pre-professional studies, 238-239
 - advisement, 239
 - course selection for biomedical pre-professional students, 239
 - pre-dentistry, 239
 - pre-law, 239
 - pre-medicine, 239
 - pre-optometry, 239
 - pre-pharmacy, 239
 - pre-veterinary medicine, 239
- Prerequisite (PRQ), 9, 48
 - and student responsibility, 48
- Press, University, 423
- Printmaking (art studio and design), 384
- Private Scholarships, *See* Scholarships
- Probation. *See* Academic probation and dismissal
- Professional communication, minor, 233
- Professional education requirements. *See* Educator Licensure Requirements
- Professional examination preparation in accountancy, 98
- Professional physics for graduate study, emphasis, 335
- Professional schools, preparation for, 238
- Professional Selling, certificate, 114
- Proficiency examination, 9, 77
 - See also* Credit by examination and Department of Mathematical Sciences
- Programs. *See* Degrees offered
- Psychological Services Center, 92
- Psychology, Department of, 349-353
 - courses, 350-352
 - degree with honors, 350
 - educator licensure, 349-350
 - major, 349
 - minor, 350
- Psychology, educational, courses, 149
- Public Administration, Department of, 354-355
 - courses, 346, 354-355
- Public administration and service, emphasis, 341
- Public and Global Affairs, School of, 243
 - courses, 243
- Public communication, advocacy and (communication studies), emphasis, 264
- Public health
 - courses, 212-213
 - general emphasis in, 207
 - major, 207-208
 - minor, 209
- Public health and health education, courses, 212-213
- Public law,
 - courses, 345
 - emphasis, 340-341
- Public policy courses (Political Science), 346
- Public service, emphasis within the B.S. in applied management, 243
- Public school employment, out-of-state, 70
- Public Service Leadership, certificate, 354
- Radio. *See* Media studies
- Rate of Completion Requirement (PACE), for financial aid, 85
- Reading courses, 132
- Reading teacher, emphasis, 128
- Readmission of former students, 9, 23
- Recognized institution, definition of, 9
- Records: academic, 81
 - and policy for release of information, 427-429
- Recreation Services, 91-92
- Reentrance, 23
 - and graduation requirements, 66-67
 - of Illinois public community college graduates or out-of-state community college graduates, 23
- Refund Policies, 83-84
- Regional courses, fees for, 83
- Regional History Center, 416
- Regional programs, 92-93
 - special fee for, 83
- Regional sites, 11-12, 93
- Registration, 71

- Regulations
 - academic, 71-82
 - general, 427-428
 - governing student teaching assignments, 68-70
 - See also individual departments
 - residence, 84
 - See also Conduct and discipline
- Rehabilitation and disability services
 - accelerated B.S. in rehabilitation and disability services/ M.S. in rehabilitation counseling, 215-216
 - courses, 216-217
 - major, 215
- Reinstatement, 9, 23-24
- Religion courses, in transfer, 79
- Religious observances and the academic schedule, 81
- Religious Studies, certificate, 236-237
- Repeating a course, 75
 - for transfer students, 78
- Requirements, departmental, definition of, 8
- Requirements for graduation, 29-65
 - See also individual colleges and departments
- Research and assessment courses, 137
- Residence
 - and regulations governing tuition charges, 84
 - requirement for graduation, 48
- Residence halls, 88
 - meal plans, 88
 - rates for, 83
- Responsibility, student, 84, 427
- Restricted enrollment. See Limited admissions
- Retail Management, certificate, 107, 114-115
- Retention, limited, 28
 - See also Academic probation and dismissal and individual colleges, departments, and majors
- Retention in educator licensure, 69
 - See also individual departments
- Reverse Transfer Credit Policy, 78
- R.N.-B.S. in nursing completion program, 221-222
- Room and board, 88
 - rates for, 83
- ROTC
 - Air Force, 220
 - Army, 218-219
- Russian
 - courses, 375
 - minor option, 370
- SAT scores, 18
- Satisfactory academic progress for undergraduates/ postbaccalaureates, 85-86
- Schedule changes, 72-73
- Scholarships, 87
 - for International Programs, 416
 - for ROTC students, 218
- Scholastic load, 79
- School business management courses, 150
- Science teaching
 - biology, 251-252
 - chemistry, 259-260
 - earth and space science, 308
 - mathematics, 323-324
 - physics, 335-336
- Sculpture (art studio and design), 384
- Second baccalaureate degree, 66
- Second emphasis, 66
- Second major, 66
- Secondary education. See Educator Licensure Requirements and individual departments
- Secondary school teaching (physics), emphasis, 335
- Secondary teaching (chemistry), emphasis, 259
- Security report, 427
- Selection of courses, 77
- Semester hour, definition of, 9
- Senior citizens, tuition waivers for, 87
- Services, University, 88-93
- Sexuality, Gender and, Resource Center, 90
- 60-80 rule. See Reentrance of Illinois public community college graduates
- Social change leadership
 - courses in, 126
 - minor, 125
- Social entrepreneurship, certificate, 108
- Social Justice and Diversity, Pathway, 65
- Social responsibility, entrepreneurship and, emphasis, 106
- Social services, family, emphasis, 195-196
- Society and culture general education course descriptions, 57-61
- Sociology, Department of, 356-361
 - accelerated B.A. or B.S./J.D. program with College of Law, 357
 - accelerated B.A. or B.S./M.A. program, 357
 - courses, 358-361
 - degree with honors, 357
 - educator licensure, 356-357
 - major, 356
 - minor, 358
- Software development, emphasis, 273
- Southeast Asian studies
 - Center for, 415-416
 - courses, 241
 - minor, 233-234
- Spanish, courses, 372-374
- Spanish and Hispanic Studies,
 - emphasis, 367
 - minor option, 370
- Special admission, 22
- Special and Early Education, Department of, 151-158
 - courses, 155-157
- Special education,
 - courses, 155-157
 - emphasis, 128
 - major, 152-154
- Special education foundations, minor, 154
- Special fees, 83
- Special requirements,
 - in College of Health and Human Sciences, 189
 - in College of Liberal Arts and Sciences, 227-228
- Special requirements for the B.S. degree,
 - in electrical, industrial and systems, and mechanical engineering, 67
 - in the College of Liberal Arts and Sciences, 67, 226-228
- Speech. See Communication, Department of
- Speech-Language-Hearing Clinic, 92
- Sponsored admission, 22
- Sport management,
 - courses, 146-147
 - major, 140
 - minor, 141
- Sport sales, minor, 141
- Sports, recreational, 91-92
- STAMP, 77
- Standards-based measurement of proficiency, 77
- Standing, academic. See Academic probation and dismissal
- State assistance, 87
- State requirements for educator licensure, College of Education, 123
- State Seal of Biliteracy, 77
- Statistics
 - major, 362
- Statistics and Actuarial Science, Department of, 362-365
 - courses, 364-365
 - degree with honors, 363
 - emphasis, 312
 - minor, 363

- Storage in university buildings, 427
- Student center, 88
- Student, classification, 79
- Student conduct, and discipline regulations, 429
 - violation of, 71
- Student employment, 87
- Student Engagement and Experiential Learning, Office of, 91
- Student financial aid, 85-87
 - Office of, 85
- Student health insurance, 88
- Student information and records, 80, 427-429
- Student responsibility, 84, 427
- Student teaching. *See* Educator Licensure Requirements and individual departments
- Student-at-large classification, 21, 421-422
- Students, classification of, 79
- Students' Legal Assistance Office, 92
- Students with disabilities, 80-81, 90
- Studio, art and design,
 - admission to major, 28
 - courses, 389-391
 - emphasis, 383-384
 - major, 383-384
- Study Abroad Office, 416
 - cosponsored study abroad and exchange programs, 416-417
 - courses, 414, 416-418
- S/U grading, 75
- Supplemental Educational Opportunity Grant, 86
- Sustainability, Pathway, 65
- Sustainable energy, emphasis, 176
- Sustainable engineering, minor, 170
- Sustainable Food Systems, certificate, 296
- Taft (Lorado) Field Campus, 93
- Tagalog language courses, 377-378
- Teacher Certification Requirements. *See* Educator Licensure Requirements,
 - See also* individual departments
- Technology, Department of, 180-188
 - courses, 183-188
 - major, 180-183
- Technology, design and, theatre,
 - admission to emphasis, 26
 - emphasis, 404
- Television. *See* Communication, Department of
- Test of Academic Proficiency (ILTS), 118
- Test of English as a Foreign Language (TOEFL) and international students, 21
- Testing Services, Office of, 91
- Thai language courses, 378
- Theatre and Dance, School of, 403-410
 - courses, 405-409
- Theatre arts,
 - courses, 405-408
 - major, 404
- Theatre studies,
 - major, 403
 - minor, 405
- Therapy, physical. *See* Health sciences
- Time arts (art studio and design), 383
- Time for completion of academic program, normal, 29
- TOEFL, 21
- Total credits, 29
- Tourism, hospitality management and,
 - courses, 203-204
 - major, 197-198
- Transcript
 - and encumbrance, 81
 - definition of, 9
 - fee for, 83
 - See also* Admission
- Transfer credit, 77-79
 - in College of Business, 95
 - in Honors, 15
 - of Illinois Articulation Initiative Credit to NIU, 77
 - for postbaccalaureate students, 21-22
 - See also* Illinois Articulation Initiative Core Curriculum
- Transfer students
 - admission of, 20-21
 - choice of catalog for graduation requirements, 67
 - from Illinois Community or Junior Colleges, 21
- Transgender Resources. *See* Gender and Sexuality Resource Center
- Translation for global literacy, minor option, 370
- Transportation, campus, 89
- Tuition and fees, 83
- Tuition waivers,
 - for ROTC members, 218
 - for senior citizens, 87
- Tutoring. *See* ACCESS tutoring program
- Undergraduate academic programs, 13-16
- Undergraduates in courses for graduate credit, 79
- Undergraduates in graduate courses for undergraduate credit, 79
- Undergraduates in law courses, 80
- UNIV courses, 413
- University Administration, 426
- University Graduation Requirements, 29-65
- University Honors Program, 14-15
- University hours, 12
- University Libraries, 422
- University Press, 423
- University requirements for educator licensure, 69
- University Services, 88-93
- University-wide interdisciplinary courses, 413-414
- Upper-division courses, 29
- Veterans
 - assistance and educational benefits for, 86-87
 - in ROTC, 218
- Veterinary medicine (pre-veterinary medicine), 239
- Violation of student conduct, 71
- Visual impairments (special education),
 - courses, 157-158
 - emphasis, 153-154
- Visiting students, 22-23
 - changing to degree status, 22-23
 - definition of, 9
- Visual and Performing Arts, College of, 380
 - interdisciplinary courses, 380
- Visual communication (art studio and design), 383
 - admission to area of study, 28
- Vocal music
 - music education, 393
 - performance, 393
- Warning, Freshmen, 76
- Water sciences, emphasis, 294-295
- Withdrawal, 9
 - and refund policy, 83-84
 - from a course, 73
 - from the university, 73-74
- Women's and Gender Studies
 - certificate, 237
 - courses, *See* Women's, Gender, and Sexuality Studies courses
 - minor, 234-235
- Women's, Gender, and Sexuality Studies
 - courses, 241-242
- Women's Resource Center.
 - See* Gender and Sexuality Resource Center

- World Languages and Cultures, Department of, 366-379
 - accelerated B.A./J.D. program, 368
 - courses, 370-379
 - degree with honors, 368
 - educator licensure, 367-368
 - major, 366-367
 - minor, 368-370
- Writing courses (English), 286-287
- Writing infused courses, 29
 - course list, 29-42
- Young Children with Disabilities Studies, certificate, 154