Notices

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, the student should remain in close touch with departmental advisers and 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.

Admission to the Graduate School is not complete until application materials have been fully processed and the applicant has been notified by the Graduate School in writing of admission.

Other statements of a legal nature are printed in the “Notices” and “General Regulations” sections of this catalog.

Student Responsibility

It is the responsibility of students to know and observe all regulations and procedures relating to the program they are pursuing, as well as those of the university and Graduate School. 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 pertaining to studies at the graduate level should be addressed to the office of the dean of the Graduate School.

Students planning to graduate should familiarize themselves with the dates relating to application for graduation and other pertinent deadlines. (See Graduate School Calendar.) It is necessary to apply for graduation by the specified deadline in order to graduate in a particular term, whether or not the student plans to attend the commencement ceremonies.

Students must satisfy the degree requirements of the catalog in force during the term for which they have been admitted to and begin course work in a degree program; or they may, with the consent of their advisers, meet graduation requirements by complying with the provisions of a later catalog. Students readmitted to a degree program must meet degree requirements of the catalog in force at the time of the later admission (or of a subsequent catalog, as provided above). Aside from degree requirements, all students are subject to the regulations and policies stated in the catalog currently in force. Exceptions to regulations contained in the Graduate Catalog require the written approval of the office of the dean of the Graduate School, unless otherwise stated in the catalog.

Graduate students and students-at-large should notify the Graduate School immediately of any change in address so that receipt of mail will not be delayed.

Graduate School Information

The Graduate School
Altgeld Hall 206
Northern Illinois University
DeKalb, Illinois 60115-2864

Phone numbers:
(815) 753-0395 (Graduate School)
(800) 892-3050 (toll-free number for Illinois callers only)
(815) 753-1000 (general university number)

E-mail address: gradsch@niu.edu

World Wide Web site: http://www.niu.edu/grad

World Wide Web information on the Graduate School is linked to much additional information on departments and their programs and includes an online version of this catalog. However, the printed catalog is the definitive version of program descriptions and of academic policies and procedures contained therein.

World Wide Web sites for academic colleges, departments, and schools are accessible through NIU’s home page at http://niu.edu as well as via the Graduate School web site. E-mail addresses are found at many of the departmental sites.

Further information on specific graduate programs can also be requested from the persons indicated in the “Directory for Correspondence” in this catalog.

Calendar

The university calendar for each term is printed in the Schedule of Classes, and an abbreviated version appears on page 4 of this catalog. For other dates that apply to graduate students, the Graduate School Calendar, available from the Graduate School, should be consulted.
Graduate Catalog
1998-99

Effective May 15, 1998

The Graduate School
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
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Calendar

The Schedule of Classes should be consulted for registration dates. For detailed information regarding Graduate School deadlines pertaining to application, admission, and graduation, see the official Graduate School Calendar, which is available from the Graduate School.

Summer Session 1998

June 15, Monday
Beginning of classes
July 6, Monday
Independence Day observed (no classes)
August 7, Friday
End of summer session
August 8, Saturday
Commencement; summer 1998 degree date

Fall Semester 1998

August 17-21, Monday-Friday
Departmental, college, and university faculty meetings
August 24, Monday
Beginning of classes
September 7, Monday
Labor Day (no classes)
November 25, Wednesday
Beginning of Thanksgiving recess at noon (no classes)
November 30, Monday
Resumption of classes
December 7-12, Monday-Saturday
Final examinations
December 13, Sunday
Commencement; fall 1998 degree date

Spring Semester 1999

January 4-8, Monday-Friday
Departmental and college faculty meetings
January 11, Monday
Beginning of classes
January 18, Monday
Martin Luther King, Jr., Holiday (no classes)
March 6, Saturday
Beginning of spring break after regularly scheduled classes
March 15, Monday
Resumption of classes
April 30, Friday
Reading Day
May 1, 3-7, Saturday, Monday-Friday
Final examinations
May 8, Saturday
Commencement; spring 1999 degree date
A Guide to Reading This Catalog

Course Designators

ACCY—Accountancy
AHPH—Public Health
AHPT—Physical Therapy
ANTH—Anthropology
ART—Art
BIOS—Biological Sciences
CHEM—Chemistry
CCE—Curriculum and Instruction
CIEE—Elementary Education
CIOE—Outdoor Teacher Education
CIRE—Reading
CISC—Curriculum and Supervision
CISE—Secondary Education
COMD—Communicative Disorders
COMS—Communication Studies
CISE—Secondary Education
ECON—Economics
ELE—Electrical Engineering
ENGL—English
EPSO—Counseling
EPSE—Special Education
EPSY—Educational Psychology
FCNS—Family, Consumer, and Nutrition Sciences
FINA—Finance
FLAL—Applied Linguistics
FLCL—Classical Languages
FLFR—French
FLGE—German
FLIN—Indonesian
FLIS—Foreign Language Independent Study
FLIT—Italian
FLMT—Foreign Language Methods
FLPO—Portuguese
FLRU—Russian
FLSP—Spanish
FLST—Foreign Language Special Topics
GEOG—Geography
GEOL—Geology
HIST—History
IBUS—Interdisciplinary Business
IDSP—Interdisciplinary
IEET—Interdisciplinary Engineering and Engineering Technology
IENG—Industrial Engineering
ILAS—Interdisciplinary Liberal Arts and Sciences
IHER—History
LEAC—Adult Continuing Education
LEBM—School Business Management
LEEA—Educational Administration
LEFE—Foundations of Education
LEIT—Instructional Technology
MATH—Mathematical Sciences
MEE—Mechanical Engineering
MET—Meteorology
MGBE—Business Education
MGMT—Management
MILS—Military Science
MKTG—Marketing
MUSIC—Music
NURS—Nursing
OMIS—Operations Management and Information Systems
PHDN—Dance Education
PHED—Physical Education
PHIL—Philosophy
PHYS—Physics
POLS—Political Science
PSPA—Public Administration
PSYC—Psychology
SOCI—Sociology
STAT—Statistics
TECH—Technology
TH—Theatre Arts
UBUS—Interdisciplinary Business
T—This letter following a course number indicates that an old number is being reused for a new course.
X—This letter following a course number indicates that the course is offered primarily by another department but may be taken for credit in the department offering it with the "X" listing.

Abbreviations Used in This Catalog

Advanced Degrees

Ed.D.—Doctor of Education
Ed.S.—Educational Specialist
J.D.—Juris Doctor
M.A.—Master of Arts
M.S.—Master of Science
M.A.S.—Master of Accounting Science
M.B.A.—Master of Business Administration
M.F.A.—Master of Fine Arts
M.M.—Master of Music
M.P.A.—Master of Public Administration
M.P.H.—Master of Public Health
M.S.—Master of Science
M.S.Ed.—Master of Science in Education
M.S.T.—Master of Science in Taxation
Ph.D.—Doctor of Philosophy

Other Abbreviations

CRQ—Corequisite
GPA—Grade point average
PRQ—Prerequisite

Definitions of Terms Used in This Catalog

*Academic dismissal: Dismissal from the university for reasons such as not maintaining the required grade point average (GPA), or for accumulating excessive hours of graduate grades of D, F, U, or WF.

*Academic probation: Academic status of a graduate-level student whose graduate GPA is below 3.00.
Accredited institution: A postsecondary institution that is accredited by the appropriate 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).

*Admission (to the Graduate School): Formal acceptance, both by the Graduate School and by a particular department or program, to pursue a specific graduate degree or certificate in a specified subject area.

*Auditing: Registering for and attending a class regularly without necessarily completing the work required for credit; requires agreement of the instructor. (No grade points or credit hours are earned for audited courses.)

Concentration: An interdisciplinary area of study in which a student may pursue course work and research. Completion of the requirements for a particular concentration will result in an appropriate notation on the student's academic record.

Corequisite (CRQ): A requirement, usually enrollment in a course, which should be undertaken at the same time as the course being described (if that requirement or its equivalent has not been completed previously).

*Correspondence course: A course, other than an independent study course, that does not involve significant real-time interaction between students and faculty, when such interaction would normally be a part of the same course offering on campus.

Departmental requirements: Courses or other requirements specified by a department as necessary for completion of a given course of study.

Dismissal: See Academic dismissal.

Drop: A procedure by which a course is deleted from a student's schedule so the course does not appear on the student's permanent academic record. A student may drop a course early in a term; this procedure must be completed by the date indicated in each academic term's Schedule of Classes. An administrative office may drop students from courses in which they are not eligible to enroll. See also Withdrawal.

Elective: A course in which a student chooses to enroll, as distinguished from a specific course required as part of a particular course of study.

Encumbrance: A hold placed on a student's record as a result of an unfulfilled obligation to the university. This may prevent the distribution of grade reports and transcripts and may prevent further registration. A student with an encumbrance preventing registration is not eligible to participate in course work and may not be enrolled in a course retroactively if the encumbrance is not cleared before the course is over.

Enrollment: Registration in a course that subsequently appears on the student's permanent academic record.

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

*Grade point: The numerical value given to letter grades. A grade of D is equivalent to 1 point per semester hour, a C to 2 points, a B to 3 points, and an A to 4 points.

*Grade point average (GPA): A student's scholastic average, computed by dividing the total number of grade points earned by the total number of credit hours attempted. For a graduate student or student-at-large, the GPA is based on all courses taken at NIU that carry graduate credit.

Graduate-level student: A graduate student or student-at-large.

Graduate student: A student admitted to the Graduate School whose admission has not been canceled or terminated and who has not been academically dismissed.

Half-year courses: Courses that are offered for the first or second half of an academic term, rather than a full term. They are distinguished in the Schedule of Classes by an F (first half term) or an L (last half) after the course number.

Hold: See Encumbrance.

*Incomplete (temporary): A grade (I) that may be assigned by an instructor when a student is temporarily unable to complete course requirements because of unusual personal circumstances. Left unresolved, a grade of I becomes on the academic record a permanent grade of incomplete (IN).

*International student: With respect to academic regulations in this catalog, any student who is not a U.S. citizen.

Major: A program of study leading to a graduate degree or certificate in a designated subject area.

Option: An academic track within a program or specialization.

Prerequisite (PRQ): A requirement, usually completion of another course or its equivalent, which should be met before a student registers for the course being described.

Probation: See Academic probation.

Proficiency examination: A way for a student to receive course credit for individual or special study. Graduate credit may not be earned by proficiency examination.

*Reentry: Return of a student to study at NIU after a lapse in enrollment, into the same classification/program as that in which the student was previously enrolled.

*Reinstatement: A procedure by which a student who was formerly enrolled in the university but was academically dismissed is permitted to enroll again.

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

Specialization: A subdivision of a graduate major representing a particular subject focus within the major area.

*Student-at-large: A student who holds a baccalaureate or higher degree from an accredited institution, who is not admitted to the Graduate School, but who has received permission from the Graduate School to register for graduate-level classes and who has not been academically dismissed.

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

*Transfer credit: Course work completed at an accredited institution other than NIU that is accepted in partial fulfillment of requirements for a graduate degree at NIU.

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

*See the more detailed discussion of this topic elsewhere in this catalog.
History

Northern Illinois University is a comprehensive university, whose faculty, staff, and students engage in instruction, research and artistry, and professional service in a variety of fields.

Established in 1895 by an act of the Illinois General Assembly, the Northern Illinois State Normal School opened its doors to students in September 1899. At that time only a two-year curriculum teacher education was offered.

In July 1921, the legislature gave the institution the name Northern Illinois State Teachers College and empowered it to award the four-year degree Bachelor of Education. By action of the Teachers College Board in 1943 the title of the degree was changed to Bachelor of Science in Education. Eight years later, the Teachers College Board authorized the college to grant the degree Master of Science in Education, and the institution's Graduate School was established.

On July 1, 1955, as a result of action by the state legislature, the college was renamed Northern Illinois State College. Moreover, the legislature authorized the college to broaden its educational services by offering academic work in areas other than teacher education. The Teachers College Board then granted permission for the college to add curricula leading to the degrees Bachelor of Arts and Bachelor of Science.

By action of the Seventieth General Assembly, Northern Illinois State College became Northern Illinois University on July 1, 1957. Since that time, authority has been granted for the university to offer additional degrees and certificates at the baccalaureate, professional, and graduate levels.

In 1965, the Illinois State Teachers College Board became the Board of Governors of State Colleges and Universities; in 1967, Northern Illinois University was placed under the control of the newly created Board of Regents; in 1996, this authority was transferred to the Board of Trustees of Northern Illinois University.

Northern Illinois University has offered work leading to graduate degrees since 1951 and currently offers graduate study in over 100 major programs and specializations. The following master's degrees, which encompass more than 50 academic majors, are now available: Master of Accounting Science (M.A.S.), Master of Arts (M.A.), Master of Business Administration (M.B.A.), Master of Fine Arts, (M.F.A.), Master of Music (M.M.), Master of Public Administration (M.P.A.), Master of Public Health (M.P.H.), Master of Science (M.S.), Master of Science in Education (M.S.Ed.), and Master of Science in Taxation (M.S.T.). In 1961 programs leading to the degrees Doctor of Philosophy (Ph.D.) and Doctor of Education (Ed.D.) were authorized; currently, the Ph.D. is offered by nine academic departments and the Ed.D. in six academic majors. The Juris Doctor (J.D.) degree, offered by the College of Law, was authorized in 1979, the Performer's Certificate in 1982, and the Educational Specialist (Ed.S.) degree in 1983.

Mission

The central mission of Northern Illinois University is the transmission, expansion, and application of knowledge through teaching, research and artistry, and public service. Recognizing that students will need to learn throughout their lives, the university provides them with the opportunity to become more competent in analytical thought, informed judgment, and effective communication. In its instructional activities, the university conveys an understanding of the organization of knowledge and the means of inquiry.

The university aims to develop a respect for rationality, a tolerance for uncertainty, and an appreciation of diversity. It fosters the capacity to explore the unfamiliar, to use the intellect in the process of discovery and the synthesis of knowledge, and to become familiar with new technology and its implications. It strives to enhance the imagination, sensibility, and creative talents of each student. It believes that all students should attain a level of academic and professional competence sufficient for productive employment and citizenship and makes opportunities available for those who are able to undertake the advanced study required for leadership in their chosen professional fields and academic disciplines.

The university makes significant contributions to the expansion of knowledge. To accomplish this, it provides an environment of academic freedom in which all are free to inquire and to disseminate scholarly and creative work. 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.

NIU enthusiastically accepts its responsibility to contribute to the nation's scientific, technological, and educational advancement, to bring ideas to bear on issues of public policy, to contribute to the sustained appreciation of our diverse cultural heritage and the international nature of contemporary life, and to prepare and develop scholars and educational leaders. The university is committed both to pure research and to the study of applications of knowledge.

Nothern 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 fully accredited by the North Central Association of Colleges and Schools. The university is fully accredited by the National Council for Accreditation of Teacher Education to offer teacher education programs. Teacher education programs are available at undergraduate and graduate levels, and may be offered in conjunction with degree programs.

In the College of Business the M.A.S., M.B.A., M.S. in finance, and M.S. in management information systems programs are accredited by AACSB - The International Association for Management Education.
In the College of Education, the Council for Accreditation of Counseling and Related Educational Programs (CACREP) has accredited the following program areas in counseling within the Department of Educational Psychology, Counseling, and Special Education: community counseling, school counseling, and student development in higher education (M.S.Ed.), and counseling (Ed.D.).

In the College of Engineering and Engineering Technology, the undergraduate programs in electrical engineering, industrial engineering, and mechanical engineering are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET). The undergraduate technology programs are developed as appropriate according to ABET (for engineering technology) or National Association of Industrial Technology (for industrial technology) criteria.

In the College of Health and Human Sciences, the M.P.H. program offered by the School of Allied Health Professions is accredited by the Council on Education for Public Health. The Department of Communicative Disorders offers an M.A. with specializations in audiology and speech-language pathology that are accredited by the Educational Standards Board of the American Speech-Language-Hearing Association and a specialization in deafness rehabilitation counseling that holds accreditation from the Commission on Rehabilitation Education. The specialization in marriage and family therapy in the M.S. program in applied family and child studies within the School of Family, Consumer, and Nutrition Sciences is accredited by the Commission of Accreditation for Marriage and Family Therapy. In the same department, the Dietetic Internship, taken in conjunction with the M.S. degree in nutrition and dietetics, is accredited by the American Dietetic Association. The graduate program in the School of Nursing is accredited by the National League for Nursing.

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

In the College of Visual and Performing Arts, the School of Art, School of Music, and School of Theatre Arts are accredited, respectively, by the National Association of Schools of Art and Design, the National Association of Schools of Music, and the National Association of Schools of Theatre.

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

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

**University Academic Publications**

The *Undergraduate Catalog* contains information on undergraduate admission policies and procedures, graduation requirements, academic regulations, expenses, housing, financial aid, and other university services, as well as detailed descriptions of academic majors, minors, and course offerings. Copies are available to current students from the university's bookstore, and to prospective students from the Office of Admissions.

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.
The Graduate School

Dean and Associate Provost for Graduate Studies and Research: Jerrold H. Zar, Ph.D.
Associate Dean: Carla W. Montgomery, Ph.D.

Graduate Council, 1997-98

Gregory Ammar, Ph.D., College of Liberal Arts and Sciences
W. Scott Bauman, D.B.A., College of Business
Jon W. Carnahan, Ph.D., College of Liberal Arts and Sciences
Mark W. Cordey, J.S.M., College of Law
William Cornfield, student, College of Education
C. William Cummings, C.D.P., C.P.A., Ph.D., College of Business
Abhijit Gupta, Ph.D., P.E., College of Engineering and Engineering Technology
Christopher Jones, Ph.D., College of Visual and Performing Arts
Nancy M. Long, Ph.D., College of Health and Human Sciences
Kenneth Maas, student, College of Liberal Arts and Sciences
Michael J. Martin, Ph.D., College of Health and Human Sciences
Philip Melnick, M.F.A., College of Visual and Performing Arts
Charles E. Miller, Ph.D., College of Liberal Arts and Sciences
Carole W. Minor, Ph.D., College of Education
Jerrold H. Zar, Ph.D., dean of the Graduate School

Graduate Programs

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.

College of Education

Department of Curriculum and Instruction
Master of Science in Education (M.S.Ed.)
Curriculum and Instruction
  with specialization in
  Curriculum and Supervision
  Outdoor Teacher Education
  Secondary Education
  Early Childhood Education
  Elementary Education
  Reading
Doctor of Education (Ed.D.)
Curriculum and Instruction
  with specialization in
  Curriculum and Supervision
  Elementary Education
  Reading
  Secondary Education

Department of Educational Psychology, Counseling, and Special Education
Master of Science in Education (M.S.Ed.)
Counseling
Educational Psychology
Special Education
  with specialization in
  Behavior Disorders
  Blind Rehabilitation
  Early Childhood Special Education
  Learning Disabilities
  Multiply Handicapped, Deaf or Vision Impairments
Doctor of Education (Ed.D.)
Counseling
  Educational Psychology

Department of Leadership and Educational Policy Studies
Master of Science in Education (M.S.Ed.)
Adult Continuing Education
Educational Administration
Foundations of Education
Instructional Technology
School Business Management
Educational Specialist (Ed.S.)
Educational Administration
Doctor of Education (Ed.D.)
Adult Continuing Education
Educational Administration
Instructional Technology

Department of Physical Education
Master of Science in Education (M.S.Ed.)
with or without specialization in
Adapted Physical Education
Exercise Physiology/Fitness Leadership
Sport Management

College of Business

Master of Business Administration (M.B.A.)

Department of Accountancy
Master of Accounting Science (M.A.S.)
Master of Science in Taxation (M.S.T.)

Department of Finance
Master of Science (M.S.)

Department of Management

Department of Marketing

Department of Operations Management
and Information Systems
Master of Science (M.S.)
  Management Information Systems
College of Engineering and Engineering Technology
Department of Electrical Engineering
Master of Science (M.S.)

Department of Industrial Engineering
Master of Science (M.S.)

Department of Mechanical Engineering
Master of Science (M.S.)

Department of Technology
Master of Science (M.S.)
  Industrial Management

College of Health and Human Sciences
School of Allied Health Professions
Master of Public Health (M.P.H.)

Department of Communicative Disorders
Master of Arts (M.A.)
  with specialization in
    Audiology
    Deafness Rehabilitation Counseling
    Speech-Language Pathology

School of Family, Consumer, and Nutrition Sciences
Master of Science (M.S.)
  Applied Family and Child Studies
    with or without specialization in
      Marriage and Family Therapy
      Nutrition and Dietetics

Department of Mathematical Sciences
Master of Science (M.S.)
  Applied Probability and Statistics
  Mathematics
    with specialization in
      Applied Mathematics
      Computational Mathematics
      Mathematics Education
      Pure Mathematics
Doctor of Philosophy (Ph.D.)

Department of Psychology
Master of Arts (M.A.)
  with specialization in
    Art History
    Studio Art

Department of Sociology
Master of Arts (M.A.)
  with specialization in
    Art Education
    Art Therapy
    Master of Fine Arts (M.F.A.)
School of Music
Master of Music (M.M.)
Performer's Certificate

School of Theatre Arts
Master of Arts (M.A.)
Master of Fine Arts (M.F.A.)
with specialization in
Acting
Design and Technology
Directing

Interdisciplinary Concentrations
Concentration in Biochemistry
Concentration in Biophysics
Concentration in Gerontology
Concentration in Higher Education
Concentration in Southeast Asian Studies
Concentration in Women's Studies
Inquiries concerning graduate programs, specializations, and concentrations should be addressed according to the following list, using the name of the individual's department or area of interest, at Northern Illinois University, DeKalb, IL 60115. Prospective students seeking information on assistantships and fellowships should also direct their inquiries to the persons whose names appear below or to other offices that appoint graduate assistants.

Accountancy: John H. Engstrom, C.P.A., C.G.F.M., D.P.A., program director and adviser
Acting: See Theatre Arts
Adult Continuing Education: Richard A. Orem, Ed.D., faculty chair
Allied Health Professions: Sherilynn F. Spear, Ph.D., chair of school
Anthropology: Fred H. Smith, Ph.D., chair of department
Applied Family and Child Studies: See Family, Consumer, and Nutrition Sciences
Art: Yale Factor, M.F.A., graduate coordinator
Audiology: See Communicative Disorders
Behavior Disorders: See Special Education
Biochemical and Biophysical Studies: John L. A. Mitchell, Ph.D., director of center
Biochemistry: See Chemistry and Biochemistry
Biological Sciences: Carl N. von Ende, Ph.D., coordinator of graduate studies
Blind Rehabilitation: See Special Education
Business Administration: Larry W. Jacobs, Ph.D., director of graduate studies; Harold O. Wright, Jr., J.D., director of executive M.B.A.
Chemistry and Biochemistry: Jon W. Carnahan, Ph.D., director of graduate studies
Communication Studies: Martha Cooper, Ph.D., graduate director
Communication Disorders: Earl J. Seaver, Ph.D., chair of department
Comparative and Developmental Administration: See Public Administration
Computational Mathematics: See Mathematical Sciences
Computer Science: Rodney Angotti, Ph.D., chair of department
Counseling: Rick A. Myer, Ph.D., faculty chair
Criminology: See Sociology
Curriculum and Instruction: Norman A. Stahl, Ph.D., chair of department
Curriculum and Supervision: See Curriculum and Instruction
Deafness Rehabilitation Counseling: See Communicative Disorders
Design and Technology: See Theatre Arts
Directing: See Theatre Arts
Early Childhood Education: See Curriculum and Instruction
Early Childhood Special Education: See Special Education
Economics: George Slotsve, Ph.D., director of graduate studies
Educational Administration: Rosita L. Marcano, Ed.D., faculty chair
Educational Psychology: Sarah Peterson, Ph.D., faculty chair
Electrical Engineering: Vincent McGinn, Ph.D., P.E., chair of department
Elementary Education: See Curriculum and Instruction
English: Mary Sue Schriber, Ph.D., director of graduate studies
Exercise Physiology/Fitness Leadership: See Physical Education
Family, Consumer, and Nutrition Sciences: Mary E. Pritchard, Ph.D., chair of school
Finance: Robert E. Miller, Ph.D., chair of department
Fiscal Administration: See Public Administration
Foreign Languages: D. Raymond Tourville, M.A., chair of department
Foundations of Education: Wilma R. Miranda, Ph.D., faculty chair
French: Susan E. Linden, Ph.D., coordinator of program
Geography: John M. Harlin, Ph.D., chair of department
Geology: James A. Walker, Ph.D., director of graduate studies
Gerontology: John F. Stolte, Ph.D., director of program
Higher Education: Coordinator
History: Stephen Foster, Ph.D., director of graduate studies
Human Services Administration: See Public Administration
Industrial Engineering: Mohamed Dessouky, Ph.D., P.E., chair of department
Industrial Management: See Technology
Instructional Technology: Margaret L. Bailey, Ph.D., faculty chair
Leadership and Educational Policy Studies: Gary L. McGoneghy, Ed.D., chair of department
Learning Disabilities: See Special Education
Management: Daniel R. Wunsch, Ph.D., chair of department
Management Information Systems: See Operations Management and Information Systems
Marketing: Peter F. Kaminski, Ph.D., chair of department
Mathematical Sciences: Gregory S. Ammar, Ph.D., director of graduate studies
Mechanical Engineering: Parviz Payvar, Ph.D., P.E., chair of department
Multiple Handicapped, Deaf or Vision: See Special Education
Music: Tim Blickhan, D.M.A., graduate coordinator
Nursing: Marilyn Frank-Stromborg, Ed.D., chair of school
Nutrition and Dietetics: See Family, Consumer, and Nutrition Sciences
Operations Management and Information Systems: William J. Tallon, Ph.D., chair of department
Outdoor Teacher Education: See Curriculum and Instruction
Performer's Certificate: See Music
Philosophy: Sherman Stange, Ph.D., chair of department
Physical Education: Judith A. Bischoff, Ph.D., chair of department
Physics: John C. Shaffer, Ph.D., chair of department
Political Science: Dwight Y. King, Ph.D., director of graduate studies
Psychology: Charles E. Miller, Ph.D., director of graduate studies
Public Administration: James M. Banovetz, Ph.D., director of division
Public Health: See Allied Health Professions
Reading: See Curriculum and Instruction
School Business Management: Ronald E. Everett, Ph.D., program director
Secondary Education: See Curriculum and Instruction
Sociology: Clinton J. Jesser, Ph.D., director of graduate studies
Southeast Asian Studies: Clark D. Neher, Ph.D., director of center
Spanish: Mary L. Cozad, Ph.D., coordinator of program
Special Education: Diane E. Deitz, Ed.D., faculty chair
Speech-Language Pathology: See Communicative Disorders
Sport Management: See Physical Education
Statistics: Mohsen Pourahmadi, Ph.D., director of division
Taxation: Rodger A. Bolling, LL.M., director of program
Technology: Dennis V. Stoia, M.B.A., chair of department
Theatre Arts: Kevin Seligman, M.A., graduate coordinator
Urban Management: See Public Administration
Visual Impairments: See Special Education
Women's Studies: Amy K. Levin, Ph.D., director of program
Admission to Graduate Study

General Requirements for Admission to the Graduate School

To be admitted as a graduate student, an applicant must have obtained a baccalaureate or higher degree from a college or university that is accredited by one of the regional agencies that evaluates such institutions (or the equivalent from an institution outside the United States), prior to the start of the NIU term for which the student is admitted. Applicants must have the approval of the department in which they plan to major and either must have a minimum 2.75 overall grade point average (GPA), based on a 4.00 system, in their baccalaureate program or must have completed 15 or more semester hours of graduate work at an accredited institution with a GPA of 3.20 or better. The overall baccalaureate GPA is here defined as the GPA as reflected on the official transcript of the institution granting the baccalaureate degree; if the institution specifies none, or uses other than a 4.00 system, NIU will compute the GPA for course work at that institution, when possible. To be admitted to a program beyond the master's degree, students must have at least a 3.20 GPA in all graduate work taken.

Applicants whose GPA is below the required level may, at the discretion of the major department, be recommended for admission if they satisfy one of the following criteria.

- Demonstrated ability to conduct graduate work at a regionally accredited college or university.
- Exceptional performance on required graduate-level admission tests (GRE or GMAT).
- Presentation of other relevant evidence acceptable to the department, such as a portfolio in art or an audition in music.

The above are minimum academic requirements for admission to the Graduate School. The applicant’s character, integrity, and general fitness to practice a particular profession may also be considered in the admissions process. Departments reserve the right, in consultation with the Graduate School, to establish additional standards and criteria for admission. It is the responsibility of the applicant to ascertain the nature and extent of these requirements. In addition, limited resources may indicate a need for limited enrollments, requiring departments to restrict admissions and to entertain special admissions only under exceptional circumstances. Admission of any student failing to meet admissions criteria as set forth in the Graduate Catalog requires the approval of the office of the dean of the Graduate School.

A student-at-large must be in good academic standing to be admitted to the Graduate School; see “Enrollment for Graduate Study as a Student-at-Large.”

Application for Admission

In order to pursue a graduate degree, one must apply and be admitted to the Graduate School, as well as be accepted for admission by the faculty of the particular program he or she wishes to pursue.

Students who wish to take graduate course work but not pursue a degree program should refer to the section “Enrollment for Graduate Study as a Student-at-Large” in this catalog.

To obtain an “Application for Admission to the Graduate School,” applicants may call or write to the Graduate School. The completed application form, with the required application fee, must be received by the Graduate School no later than June 1 for admission to the fall semester, November 1 for the spring semester, and April 1 for the summer session. All remaining application materials—official transcripts, required test scores, and letters of recommendation—must be received by August 1 for the fall semester, January 1 for the spring semester, and June 1 for the summer session. These application deadlines are waived for a student already enrolled in a graduate program at NIU who wishes to apply for admission to another graduate program. See also “International Students” for application deadlines applicable to such students.

The above deadlines are Graduate School deadlines and represent the dates by which materials must be received by the Graduate School in order for an application to be processed for a given academic term. However, an individual department’s admission procedures may involve committee meetings, interviews, or other activities that only occur at certain times, which may be well before the Graduate School’s final application deadline for a given term. Applicants are therefore advised to contact the department or program in which they are interested in order to ascertain any such special deadlines, and to refer to the departmental sections of this catalog for additional information. (The instructions on the application forms include all such departmental deadlines of which the Graduate School was aware at the time of printing.)

Payment for the application fee indicated on the application form, or indication that the applicant is exempt from the fee for one of the reasons described below, must accompany the submission of the application form. Unless the applicant is exempt from the fee, the official date of receipt of the application is considered to be the date upon which the application form is submitted with the fee; an application form submitted without the fee will be returned, unprocessed, to the applicant. A person who qualifies for the GRE fee waiver is exempt and should include evidence of that fee waiver in lieu of the application fee. Also exempt are students who have been enrolled in NIU graduate programs within two years prior to the start of the term for which they are seeking admission. Employed and retired NIU faculty, operating staff, and supportive professional staff are also exempt and must indicate their faculty or staff affiliation when submitting the application form, which will be accepted subject to verification of exempt status. Qualified veterans under the Illinois Veteran Grant (IVG) Program will be exempted upon presenting a valid copy of their IVG Notice of Eligibility.

Care should be exercised in selecting persons to write letters of recommendation. These should be persons in a position to write analytically about the applicant’s academic qualifications to pursue graduate studies, and/or professional competence and ability to benefit from advanced study. For an applicant currently pursuing a graduate program, at least one of the letters should be from a faculty member in the department in which the student is enrolled. Applicants uncertain of the suitability of particular individuals as writers of recommendations should consult with the head of the department or program to which they are applying.

Applicants for admission to the Graduate School assume all responsibility for the completion of their admission files; the Graduate School assumes no obligation to inform them about erroneous or missing credentials.
A comprehensive orientation program is provided by the International Student and Faculty Office for new students from abroad. This begins when the student, before arriving in this country, is granted admission to the university, and continues after the student’s arrival on campus. The program includes dissemination of information and materials concerning the university, the university community, and U.S. immigration rules and regulations; a week of intensive orientation activities at the beginning of the first semester of attendance; and follow-up activities during the remaining period of residency and study. A one-time orientation fee is charged for this program. As part of this orientation program, new international students whose native language is not English will be given further tests of their English language skills.

Examinations Required for Admission

With the approval of the applicant’s prospective major department, the requirement to submit official scores on the Graduate Record Examinations (GRE) or the Graduate Management Admission Test (GMAT) may be waived for an applicant who has already earned a graduate degree from an accredited institution or for an applicant who has pursued or has completed a baccalaureate degree at NIU with a major in that department with a cumulative NIU undergraduate GPA of at least 3.00. In special cases, if an applicant who has already taken one of these standardized tests is applying for admission to a program that requires the other, the department may agree to accept scores on either the GRE or the GMAT.

Required examinations may be taken through NIU’s Office of Testing Services, or at other testing locations. For testing dates at this university and other locations, write to Graduate Record Examinations, Educational Testing Service, P.O. Box 6000, Princeton, NJ 08541-6000, U.S.A., regarding the GRE; Graduate Management Admission Test, Educational Testing Service, P.O. Box 6103, Princeton, NJ 08541-6103, U.S.A., regarding the GMAT; The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204-3596, regarding the MAT; and TOEFL/ITSE Publications, P.O. Box 6154, Princeton, NJ 08541-6154, U.S.A., regarding the TOEFL.

Up to eight weeks may be required for the Graduate School to receive scores after the administration of the tests. An applicant should plan to take the tests early enough so that scores may reach the Graduate School before the final application deadline for a given semester.

Graduate Record Examinations (GRE)

In order to be admitted to the Graduate School, all applicants, other than those applying to programs in the College of Business, the M.F.A. or M.A. degree programs with a specialization in studio art in the School of Art, the M.M. degree program in the School of Music, or to the M.F.A. degree program with specialization in acting or in design and technology in the School of Theatre Arts, must have provided official scores (verbal, quantitative, and analytical) on the General Test of the GRE to the Graduate School. Applicants to programs in the Department of Curriculum and Instruction may submit Miller Analogies Test (MAT) scores in lieu of GRE scores.

In addition, the GRE scores on the Subject Test in biology or biochemistry are required as an admission credential for applicants to the Department of Biological Sciences. These scores must be no more than five years old.

The Educational Testing Service (ETS), which administers the Graduate Record Examinations program on behalf of the Graduate Record Examinations Board, has announced its intention of reporting student scores only if they are no more than five years old.
old. Students who are unable to obtain their GRE scores from ETS because of this policy should contact the Graduate School about possible alternative means to satisfy the GRE requirement.

Graduate Management Admission Test (GMAT)

Applicants for graduate study in business must submit official scores on the GMAT to the Graduate School. The GMAT score requirement may be waived for applicants to the M.S.T. program on the basis of significant work experience. Applicants to programs in the College of Business are not required to take the General Test of the GRE.

Test of English as a Foreign Language (TOEFL)

An applicant whose native language is not English must present a TOEFL score of at least 550, where the score is for an examination administered no more than 24 months prior to the beginning of the academic term for which admission is sought. At the discretion of the intended major department, possession of a baccalaureate or higher degree from an accredited institution in the U.S., the U.K., or Canada, at which the language of instruction was English, may serve in lieu of the TOEFL score. The TOEFL requirement is waived for a student already enrolled and in good academic standing in a degree program at NIU.

Notification of Admission

Admission decisions may be made within a few weeks following the receipt of all credentials. For programs in which space is limited, however, admission decisions may be made only at certain times during the academic year. Accordingly, notification of decisions may not be mailed until some time after the formal deadline for applications has passed. Applicants should consult individual program descriptions or contact departments directly for particular admission decision schedules that may be applicable.

A student must be admitted to the Graduate School by the Graduate School, and must be admitted to the Graduate School in order to be admitted to a graduate degree program. Therefore, the official notification of admission, and of any conditions attached to that admission, is a letter sent to the applicant by the Graduate School. Correspondence from individual departments or programs does not constitute official notice of admission.

When a student already enrolled in the Graduate School is admitted to an additional graduate degree program, any department to which the student is already admitted will be notified of the new admission.

A student must be admitted by the close of the first week of an academic term in order for the admission to be effective for that term. If the admission process is completed after that deadline, whether because the file was not completed or because departmental action was not taken earlier, the admission will be effective for the following academic term. The term for which the applicant is admitted is stated in the official admission letter from the Graduate School.

Provisional Admission

A person whose application file is incomplete because certain required application materials have not been received in the Graduate School, but who otherwise meets departmental and Graduate School requirements for admission, may, at the request of the major department, be granted provisional admission, for one term only, pending a final decision on his or her application for admission. Provisional admission may be considered in the absence of such materials as official transcript(s), letter(s) of recommendation, or GRE Subject Test scores; provisional admission will not be granted in the absence of scores from the GRE general test or the GMAT, as applicable. A person admitted provisionally is not a student-at-large. If the conditions of the provisional admission are not satisfied by the end of the term of admission, admission to the Graduate School will be terminated. Students whose provisional admission is terminated for failure to satisfy the conditions of the provisional admission must reapply for admission to the desired degree program, and are expected to remedy the previous deficiencies in the application file before admission will be granted.

Provisional status is a courtesy to persons who have not achieved full admission. The degree-seeking applicant who enrolls as a provisional student accepts the risk of termination of admission. Graduate assistantship appointments for students with provisional admission status are limited to the one academic term of that status, though they may be extended if the student subsequently satisfies the terms of the provisional admission.

Provisional admission may not be deferred; the student should instead arrange to provide the missing credentials to permit consideration for unconditional admission in a subsequent term.

Admission with Stipulation

Graduate students may be admitted with stipulation. Such a stipulation is specified by the particular department or program to which admission is sought. A student who fails to meet the stipulation may be dropped from the program at the end of the time period specified, at the discretion of the department. Admission to the Graduate School is also terminated, unless the student has been admitted to another graduate program. However, such a student may seek admission to another graduate program and readmission to the Graduate School through the normal processes provided that she or he is in good academic standing. Graduate assistantship appointments for students admitted with stipulation may be limited to the time period specified under the stipulation.

Tentative Admission

The admission of a student who will have completed a baccalaureate degree prior to matriculation as a graduate student at NIU, but who has not yet provided an official transcript verifying completion of that degree, is considered a tentative admission. The same is true of an applicant to a post-master’s program that requires the completion of a master’s degree prior to matriculation in that post-master’s degree program. The student is expected to provide the requisite degree transcript within one month of matriculation in the program to which tentative admission has been granted, and will not be permitted to enroll in that program for more than one term if the required transcript is not provided.

If a student is granted tentative admission upon the presumption of a completed baccalaureate degree, and it is subsequently discovered that the baccalaureate degree was not completed prior to the start of the term for which tentative admission was granted, the student will lose any graduate credit earned during that term.

Early Admission of NIU Undergraduates

Early admission to the Graduate School is available to seniors in their final term of enrollment at NIU who wish to take courses for graduate credit. Students who apply for and receive early admission may take approved 400-level courses and 500- and 600-level courses for graduate credit. The student granted early admission must inform the Graduate School in writing, prior to the start of the final undergraduate term, which such 400-level courses are being taken for undergraduate credit to complete the requirements for the baccalaureate degree.
Application for early admission is made through the Graduate School. A student applying for early admission must meet Graduate School application deadlines and must also have applied for graduation from the baccalaureate program. No student may enroll more than one term under early-admission status.

Matriculation; Deferral of Admission

In order to establish their admission, graduate students must enroll in the semester or summer session for which they are admitted. At the discretion of the office of the dean of the Graduate School and with permission of the major department, matriculation may be deferred up to but not beyond two calendar years. The request for deferral of admission must be submitted to the Graduate School, in writing, no later than the end of the academic term for which admission has been granted. If students do not request a deferral of admission, and fail to matriculate (enroll in the term of admission) as required, their admission to that program is canceled. If the student was not already admitted to another graduate program, admission to the Graduate School is also canceled as a result. Provisional admission may not be deferred; the student should instead arrange to provide the missing credentials to permit consideration for unconditional admission in a subsequent term.

U.S. Social Security numbers are required for registration purposes. New international students, and any students who cannot initially provide a U.S. Social Security number, are assigned temporary identification numbers by the Graduate School, but should obtain a permanent number from a Social Security office as soon as possible. New international students may obtain Social Security numbers as part of the orientation program prior to the start of the semester.

Change of Major/Specialization

A student who wishes to change from one degree program (major) or specialization to another must submit a completed application for this change to the Graduate School. The faculty of the prospective new program will be given the opportunity to review the student's original Graduate School application and supporting credentials, and any materials relevant to the student's subsequent academic progress at NIU. The prospective new program may request new letters of recommendation and/or a new goals statement specific to the new program the student desires to enter.

If the change of degree program is approved, admission to the original program will be canceled, and the student will be notified of the change. If the student is not admitted to the desired new program, the student's original admission will stand. A person must have matriculated as a graduate student before a change of degree program can be requested. A change of degree or major is subject to regular Graduate School application and admission deadlines, and it is effective when the student enrolls in the academic term specified in the official letter of admission to the new program. A change of specialization, or admission to a specialization, within the same program may be requested during any term in which the student is enrolled and it is effective immediately upon approval by the department. A student must be in good academic standing at the time a change in major or specialization is to take effect.

Concurrent Pursuit of Multiple Graduate Programs

A student may be admitted to two (or more) degree programs (majors) concurrently. A new application form must be completed for each degree program to which the student desires admission. Each intended program may review the student's existing Graduate School academic file and may require letters of recommendation and/or a goals statement pertinent to the particular program. When a student already enrolled in the Graduate School is admitted to an additional graduate degree program, the department(s) to which the student is already admitted will be notified of the new admission. A student admitted to more than one degree program is considered to be pursuing each one independently in the sense that each degree can be awarded as all requirements for it are satisfied. See also "Dual Credit for Graduate Course Work."

Termination of Admission; Retention

A student failing to maintain good academic standing may be academically dismissed from the Graduate School, as described under "Academic Standing" in the "General Regulations" section that follows. Graduate students who are academically dismissed lose their status as graduate students, even if they have previously earned a graduate degree at NIU. In addition, a student in good academic standing may be dismissed from a graduate program for various academic reasons, including falsification of application materials, failure to satisfy stipulations imposed upon admission to the program, and failure to satisfy other program or Graduate School requirements in timely fashion according to established policies.

A student previously enrolled in a graduate degree program at NIU who did not graduate from that program, and who has not been enrolled for 24 consecutive months, will have that admission canceled. See "Readmission/Reentry."

If a student has been admitted to a graduate degree program, and does not complete any course work applicable to that program for 24 consecutive months, then, at the discretion of the department, the student's admission to that program may be terminated. Satisfactory academic progress in a program also involves maintaining the standards of academic and professional integrity expected in a particular discipline or program; failure to maintain these standards may result in termination of the student's admission to the program.

Admission to the Graduate School is contingent on admission to a particular degree program. Therefore, when admission to a program is terminated, the student's admission to the Graduate School is also terminated (unless the student is already admitted to another graduate degree program). Admission to the Graduate School is also terminated because of dismissal from or termination of admission to a program may apply for admission to another degree program (if in good academic standing overall), or may apply for student-at-large status, in order to continue graduate-level study.

A student who has been academically dismissed while a graduate student or student-at-large at NIU is not eligible for admission or reinstatement but must petition the Graduate Council Appeals Committee for academic reinstatement.

Readmission/Reentry

A student who earns a graduate degree at NIU retains the status of "graduate student" thereafter, unless academically dismissed from the Graduate School. Such a student may enroll in further course work as a graduate student (rather than as a student-at-large) if further course work is desired.

If a student who was previously enrolled in a graduate degree program at NIU but whose admission has been canceled still wishes to undertake a graduate degree program (the same or a different one), she or he must apply for admission to the Graduate School to pursue the desired degree program. If the student no longer wishes to pursue a degree, and did not previously complete a graduate degree at NIU, but does wish to undertake further graduate course work, she or he should apply for student-at-large status.
All other graduate students and students-at-large who interrupt their studies for more than ten consecutive years must notify the Graduate School of their intentions to reenter the university by submitting a completed application for reentry prior to registration, or supplying the necessary information during telephone registration. The reentry application serves as a notice of the student’s intention to resume registration, so that institutional records can be brought up to date.

Graduate students and students-at-large who have been academically dismissed are not eligible for admission or reentry; they should see the section entitled “Academic Reinstatement” elsewhere in this catalog.

Enrollment for Graduate Study as a Student-at-Large

Persons who have not applied for admission to the Graduate School, who have applied but have not yet been admitted, who were previously admitted but whose admission lapsed or was terminated prior to the completion of a degree, or who have been denied admission may be permitted to register for graduate work as students-at-large. In order to receive permission to register as a student-at-large, an individual must submit to the Graduate School a completed application for student-at-large status, and provide to the Graduate School an official transcript showing that the applicant holds a baccalaureate or higher degree from an accredited institution (or the equivalent from an institution outside the United States). The transcript must be provided by the institution conferring the degree.

A graduate student who has been academically dismissed from the Graduate School may not enroll as a student-at-large unless granted academic reinstatement for this purpose by the Graduate Council Appeals Committee. A student granted student-at-large status on the presumption of a completed baccalaureate or higher degree as described above is expected to provide the required degree transcript within one month of matriculation as a student-at-large at NIU, and will not be permitted to enroll for more than one term if that transcript is not provided. The student will remain ineligible for further registration, or for issuance of NIU transcripts, until the required degree transcript is received, and cannot expect any credit for work undertaken during the period of ineligibility for registration. If it is subsequently discovered that the necessary degree was not earned prior to the start of the term for which student-at-large status was granted, the student will lose any graduate credit earned during that term.

Student-at-large status is primarily for the purpose of taking graduate-level classes; persons with a baccalaureate degree wishing to take only undergraduate classes or to pursue another baccalaureate degree at NIU should do so through one of the student categories designed for that purpose (e.g., the "Graduate" classification). Information about such categories is available from the Undergraduate Admissions Office.

Permission to register as a student-at-large should not be confused with admission to the Graduate School. A person seriously considering pursuing an advanced degree should apply for admission to the Graduate School as early as possible. Indeed, it is generally preferable for such a person to explore regular admission, provisionsional admission, or admission with stipulation prior to seeking enrollment as a student-at-large. Advice should be sought through the appropriate academic department or the Graduate School.

A student-at-large is not eligible for appointment to a graduate assistantship.

A student-at-large may apply for admission to the Graduate School. However, even if admission is achieved, the graduate credit accumulated as a student-at-large will not necessarily be counted toward an advanced degree at this university, and certain programs have limits on the number of student-at-large hours that can be applied toward a specific degree. Therefore, a student-at-large who intends to pursue a graduate degree should apply for admission as soon as possible. Students-at-large are normally prohibited from registering for graduate business courses.

Unless otherwise indicated, the general provisions of the Graduate Catalog apply to students-at-large. In particular, a student-at-large is subject to the same regulations governing probation and dismissal as a student admitted to the Graduate School. These regulations, described under the heading “Academic Standing,” include the requirement that a student-at-large must maintain a minimum 3.00 GPA in all graduate-level work undertaken at NIU in order to remain in good standing. Students-at-large who are placed on academic probation and fail to regain good standing within the prescribed period of further enrollment, or who accumulate 6 or more semester hours of D, F, U, or WF in graduate-level work, are subject to academic dismissal.

A student-at-large who is in academic probationary status or has been academically dismissed may not be considered for admission to the Graduate School. Also, if a student-at-large is admitted to the Graduate School but goes on academic probation prior to matriculation as a graduate student, then that student’s admission to the Graduate School is canceled and good academic standing must be regained before the student can again be considered for admission to the Graduate School.

Postgraduate Classification

A postgraduate is a student who has an earned baccalaureate degree and wishes to take additional undergraduate courses or to pursue a second undergraduate degree. Admission as a postgraduate student is granted through the Undergraduate Admissions Office.

A postgraduate is not eligible to enroll in any course for graduate credit. However, postgraduate students may enroll in a limited number of 500- and 600-level courses for undergraduate credit; see "Undergraduates in Graduate Courses for Undergraduate Credit." Credit earned while a postgraduate is undergraduate credit and, therefore, may not be later applied toward a graduate degree. Conversely, graduate credit earned as a graduate-level student may not be applicable toward an undergraduate degree; the evaluations staff of the Office of Registration and Records should be contacted for further information.

Whether postgraduate or a graduate-level (graduate student or student-at-large) classification is the more appropriate will depend on the student's educational 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; students should contact a financial aid counselor in the Student Financial Aid Office for more information. A student wishing to change from a postgraduate to a graduate-level classification, or vice versa, must formally resign the original classification before the new classification is granted, and must have the approval of both the appropriate undergraduate college office (determined by the postgraduate major) and the office of the dean of the Graduate School.
General Regulations

Student Responsibility

It is the responsibility of students to know and observe all regulations and procedures relating to the program they are pursuing, as well as those of the University and Graduate School. 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 pertaining to studies at the graduate level should be addressed to the office of the dean of the Graduate School.

Students planning to graduate should familiarize themselves with the dates relating to application for graduation and other pertinent deadlines. (See the Graduate School Calendar, copies of which may be obtained from the Graduate School.) It is necessary to apply for graduation by the specified deadline in order to graduate in a particular term, whether or not the student plans to attend the commencement ceremonies.

Students must satisfy the degree requirements of the catalog in force during the term for which they have been admitted to and begin course work in a degree program; or they may, with the consent of their advisers, meet graduation requirements by complying with the degree requirements of a later catalog. Students readmitted to a degree program must meet degree requirements of the catalog in force at the time of the later admission (or of a subsequent catalog, as provided above). Aside from degree requirements, all students are subject to the regulations and policies stated in the catalog currently in force. Exceptions to regulations contained in the Graduate Catalog require the written approval of the office of the dean of the Graduate School, unless otherwise stated in the catalog.

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 may 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. The office of the dean of the Graduate School is the authoritative office for verifying deviations from provisions in this catalog.

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, for example, if they copy the work of another or use unauthorized notes or other aids during an examination or turn in as their own a paper or an assignment written, in whole or in part, by someone else. Students are guilty of plagiarism, intentional or not, if they copy material from books, magazines, or other sources without identifying and acknowledging those sources or if they paraphrase ideas from such sources without acknowledging them. Students guilty of, or assisting others in, either cheating or plagiarism on an assignment, quiz, or examination may receive a grade of F for the course involved and may be suspended or dismissed from the university.

A faculty member has original jurisdiction over any instances of academic misconduct that occur in a course which the faculty member is teaching. The student shall be given the opportunity to resolve the matter in meetings with the faculty member and the department chair. If the facts of the incident are not disputed by the student, the faculty member may elect to resolve the matter at that level by levying a sanction no greater than an F for that course. The faculty member shall notify the student in writing whenever such action is taken, and the University Judicial Office shall receive a copy of the Academic Misconduct Incident Report indicating final disposition of the case, which will be placed in the student's judicial file. In all matters where the charge of academic misconduct is disputed by the student or if the faculty member feels a sanction greater than an F in the course is appropriate (such as repeated offenses or flagrant violations), the faculty member shall refer the matter to the University Judicial Office, making use of the Academic Misconduct Incident Report. Additional sanctions greater than an F in a course can be levied only through the University Judicial System. Suspension or dismissal from the university for academic misconduct will result in a notation of that action on the transcript of a graduate-level student.

The university has adopted policies and procedures for dealing with research misconduct among its students, faculty, and staff. The guidelines, which are available in department offices and in the office of the dean of the Graduate School, pertain to the intentional commission of any of the following acts: falsification of data, improper assignment of authorship, claiming another person's work as one's own, unprofessional manipulation of experiments or of research procedures, misappropriation of reseach funds.

If a graduate student fails to maintain the standards of academic or professional integrity expected in his or her discipline or program, the student's admission to the program may be terminated.

A statement on students' rights to the products of research is available in department offices and in the office of the dean of the Graduate School.

Registration

Registration procedures as well as class offerings are published in the Schedule of Classes for each academic term. Students will not receive credit for any course for which the registration is not completed according to university procedures. Conversely, it is not legitimate to attend or participate in a course in which one is not registered.

Students who have any obligation to the university (such as unpaid fines, tuition, fees, dormitory charges, missing admission documents) will not be allowed to register for classes in subsequent terms until all obligations are met and should not expect retroactive enrollment for a period of time during which they were not eligible to register. (See "Encumbrances.")
Registration is not complete until all tuition and fees are paid. Individuals who have not paid tuition and fees by the applicable deadlines may have their registration canceled. However, nonpayment of tuition and fees does not necessarily result in cancellation of registration, nor is it an appropriate means by which to effect withdrawal. A student wishing to drop or withdraw from a course must do so by following established procedures as described in the Schedule of Classes booklet for each term, and by the applicable deadline. Failure to do this by specified deadlines may result in continued registration and/or financial liability.

Registration may also be canceled for students who fail to satisfy admission or registration requirements or requirements for student-at-large status.

**Immunization Policy**

Illinois law and university policy require that all students born on or after January 1, 1957, enrolling in classes at the NIU DeKalb campus or the Lorado Taft Field Campus provide written evidence of current immune status with respect to certain communicable diseases, or evidence of exemption from this requirement, by the first day of the first term enrolled. Students enrolled only in off-campus classes such as at the Hoffman Estates or Rockford centers; students born before January 1, 1957; and students enrolled in NIU prior to fall 1989 are exempt from these requirements. Students applying for religious exemption should contact the University Health Service for information.

Failure to provide the required documentation and be in compliance with the state law by the first day of the first term enrolled will result in a $25.00 late processing fee. An encumbrance will also be placed on all of the student's records if he or she is not in compliance.

Immunization forms may be obtained from the University Health Service. For information or forms for exemptions, contact the University Health Service at (815) 753-9585.

**Encumbrances**

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 include past-due obligation to the university (such as unpaid tuition, fees, fines, or residence hall charges); incomplete admission requirements (such as missing transcripts or other academic credentials); and a disciplinary action by the university or the Student Judicial Office.

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 to the Office of Registration and Records.

For immediate release of monetary encumbrances, all past-due obligations to the university must be paid with a cashier's check, certified check, or money order.

**English Proficiency**

Graduate students whose native language is not English are required to take university examinations of their English language skills, unless they have earned a baccalaureate degree from an accredited institution in the U.S., the U.K., or Canada, at which the language of instruction was English. Those whose English appears deficient or marginal for purposes of graduate study and scholarly communication will be required to improve their competence in the language. They will then be required to take and pass either the two-course sequence of ENGL 451 and ENGL 452, or the single course ENGL 453, depending on the results of competency testing. A student's major department may also require completion of other course work in English if deemed necessary for success in graduate study in the student's chosen field.

**Course Load**

A graduate-level student's course load includes all courses for which the student is registered, graduate or undergraduate, whether taken for credit or audited. A course from which the student has officially withdrawn is no longer part of that student's course load. A full-time load for a graduate student or student-at-large in a fall or spring semester is 9 semester hours, and in summer session is 6 semester hours. A graduate-level student on academic probation may not enroll for an overload. A student in good academic standing considering an overload should seek academic advice and must obtain approval to carry more than 12 hours in the fall or spring semester or 9 hours in the summer session. For a graduate student in a degree program, this approval must be obtained, in advance, by the student's major department; for a student-at-large, or a graduate student without a major department, the prior approval of the office of the dean of the Graduate School is required.

Graduate students holding assistantships during a fall or spring semester are to carry 9 semester hours of course work throughout the semester. In the summer session, students on such appointments are to carry 6 semester hours. Reductions of up to 3 semester hours in the expected course load, and any overload, must be approved in advance by the appointee's major department. Any greater reduction must be approved in advance, in writing, by the appointee's department chair and the office of
the dean of the Graduate School. Graduate students holding fellowships, internships, or similar appointments are bound by the above regulations unless the conditions of their appointments specify otherwise and the exception has the approval of the Graduate School.

An international graduate student on an F1 or J1 visa is required to carry 9 semester hours in the fall and spring semesters. Such a student is not required to be enrolled in the summer session to be in compliance with immigration regulations, but may be required to be registered in the summer under other university regulations, such as these pertaining to graduate assistants; see "Continuous Enrollment." Permission to take fewer than 9 semester hours in the fall or spring must be obtained in advance from the student’s major department and the office of the dean of the Graduate School. An international student pursuing a program that requires a thesis, dissertation, or similar activity offered under course number 599 or 699 who has completed all other required course work for the program may, upon recommendation of the major department, be granted approval to carry a reduced course load for the balance of the time required for completion of the degree program.

Students may obtain certification that they are pursuing their studies full-time only if they are enrolled in a full course of study as defined above for their particular situation. A student with an approved underload is, by definition, not enrolled for a full course load. Therefore, such a student cannot expect to obtain official verification of full-time status, for purposes such as deferment of educational loans, for example.

Graduate Credit for 400-level Courses

Some 400-level courses are available for graduate credit in a given academic term. These courses are starred in the Schedule of Classes; however, graduate students registering for 400-level courses are responsible for ascertaining whether these courses have been approved for graduate credit and whether the particular class section in which they enroll is offered for graduate as well as undergraduate credit.

Undergraduate students may also enroll in starred 400-level courses. When students enrolled for undergraduate credit and students enrolled for graduate credit are in the same course, additional course requirements for the latter group may be imposed. In any section of a 400-level course that is available for graduate credit, graduate students and students-at-large must be enrolled for graduate credit unless otherwise provided for that particular course in the Graduate Catalog.

See individual degree requirements for restrictions on the use of 400-level graduate credit towards a degree.

Eligibility to Enroll in Courses Numbered 599 and 699

Thesis and dissertation research, and other scholarly and creative activities offered under courses numbered 599 and 699, are intended as culminating academic experiences in the respective graduate programs. Therefore, in order to be eligible to enroll in a course numbered 599 or 699 a student must be admitted to the corresponding degree program; students-at-large are not eligible to enroll in such courses.

Auditors

With permission of the instructor, a student may enroll in a class as an auditor. In order to have a satisfactory audit (grade of O) recorded on the transcript, the student must satisfy audit requirements as determined in advance between the student and the course instructor. A student who registers to audit a course and fails to meet such requirements may be assigned an unsatisfactory audit (grade of W) at the discretion of the instructor. A student who enrolls as an auditor cannot expect to submit assignments to be graded by the instructor unless those assignments are part of the audit requirements established when permission to audit was granted. A student enrolled for credit who wishes to change that enrollment from credit to audit after the drop deadline must do so by the credit-to-audit deadline specified in the Schedule of Classes, and must have the approval of the instructor, the department, and the office of the dean of the Graduate School.

Tuition and fees are charged for audit hours on the same basis as for hours taken for credit. Audit hours are included in the calculation of the total course load, but a student who enrolls as an auditor will not receive credit for the course. A student enrolled as an auditor who wishes to change that enrollment to registration for credit must do so early in the term, no later than the add/drop deadline specified in the Schedule of Classes for that course.

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. Undergraduate hours are included in the calculation of academic load. For graduate students and students-at-large the deadlines and other conditions of enrolling in, dropping, or withdrawing from an undergraduate class are the same as those pertaining to a graduate class.

Undergraduates in Courses for Graduate Credit

Seniors in their final term at NIU who want to take courses for graduate credit (approved 400-level and any 500- and 600-level courses) must apply for and receive early admission to the Graduate School, which requires the same documents and approvals as regular admission. No student may enroll more than one term under early-admission status. (See "Early Admission of NIU Undergraduates.")

Undergraduates in Graduate Courses for Undergraduate Credit

Northern Illinois University undergraduate students may complete a maximum of 6 semester hours of 500- or 600-level course work for undergraduate credit, if they have completed 90 semester hours of credit towards their baccalaureate degree with a GPA of at least 3.00 or have previously completed a baccalaureate degree. They must also obtain, in advance, written approval from the instructor and from the office of the dean of the Graduate School to enroll in the course for undergraduate credit. In addition, for a 600-level course, the approval of the department offering the course is required.
Law Students in Graduate Courses

A student in the Northern Illinois University College of Law may enroll in graduate courses, provided that he or she has earned a baccalaureate or graduate degree from an accredited institution and has obtained all necessary approval of the College of Law. A law student not also admitted to the Graduate School must obtain permission to register as a student-at-large. Enrollment of a law student in graduate courses will be for graduate credit.

Graduate Students in Law Courses

With the approval of the student's major department and the office of the dean of the Graduate School, up to 9 semester hours of course work from the Northern Illinois University College of Law may be applied toward a graduate degree program. A graduate student not simultaneously pursuing a degree in the College of Law must petition the dean of the College of Law for permission to enroll in any law course. Such permission will only be granted in special circumstances. Credit hours in NIU law courses will be counted as transfer credit in the context of transfer-credit limits in degree programs and will not contribute to the student's graduate GPA. Law courses taken at other institutions are not graduate degree programs and will not contribute to the student's graduate requirements for a graduate degree. Unless otherwise specified in this catalog or in the student's letter of admission or program of courses, the student must also obtain the approval of the major department to repeat the course.

Variable Course Hours; Repeatability of Courses

Following the title of each course is a number in parentheses denoting the number of semester hours of credit available for the course. Where a range is given—e.g., "(1-3)"—the course is a variable-hour course. In such a case the department may offer the course for a fixed number of hours, within that range, in a given academic term or may allow students to select any number of hours within that range. A student enrolling in a variable-hour course should ascertain at the start of the term the number of hours of credit for which that particular offering of the course is available that term.

A course description may indicate that the course may be repeated to a specified maximum number of semester hours. There may be a lower or upper limit to the number of hours in a particular course that may be applied toward meeting the credit-hour requirements for a graduate degree. Unless otherwise specified in this catalog, graduate courses may be repeated for credit only under the following circumstances.

If the student meets the requirements for the non-penalty repeat option, the course may be retaken under that option.

In a case where, to satisfy a program requirement, a student must achieve a certain grade as specified in the Graduate Catalog, the course may be repeated once. If the student again fails to achieve the required grade, the student's admission to that program will be terminated.

If a course taken to complete the requirements for a graduate degree does not fall within the period of time allowed for that degree, the course may be retaken for credit with approval of the student's major department.

The department in which authority for an approved teacher certification program resides may determine that credit in a course required for that program was obtained too long ago to be acceptable in meeting current requirements for certification. In that case, the department may approve retaking the course for credit.

A variable-hour course may be taken only once for credit, unless the catalog description specifies that it may be repeated or unless one of the conditions listed immediately above is met. Where a course is repeatable, maximum credit limits are stated in the course description. 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.

These limitations on repeatability of courses do not restrict which courses may be taken under the nonpenalty repeat option described below, for under the nonpenalty repeat option credit is granted for only one of the two times the course is taken. Restrictions on repeatability of courses apply only to registration for credit, not registration for audit.

Nonpenalty Repeat Option

The nonpenalty repeat option is available only for graduate courses in which a grade below B was attained. In order to repeat a course on a nonpenalty basis, a student in a graduate program other than a doctoral program must have written approval of the student's major department; students-at-large and others not in degree programs must have written approval of the office of the dean of the Graduate School. When a course is repeated on a nonpenalty basis, only the higher of the two grades earned for the course is computed in the GPA. Enrollments resulting in recorded grades of IN, NG, NR, WF, or WP which are not instructor-assigned, and enrollments for audit (no credit), cannot be counted as "repeats" under this policy. If the grades are identical, either (not both) is computed in the GPA. No student may repeat more than 6 semester hours of course work on a nonpenalty basis; no course may be repeated more than once under this option. The nonpenalty repeat option is not available to a student admitted to a doctoral degree program.

Drop of or Withdrawal from a Course

All drops of or withdrawals from courses must be accomplished before the applicable deadlines. Schedule-change deadlines may be determined by consulting the Schedule of Classes. Drop and withdrawal procedures are also described in each term's Schedule of Classes; questions about those procedures should be directed to the Graduate School.

It is possible for a student to drop a course prior to the start of or early in the course. When a course is dropped, no record of the enrollment appears on the student's record. After the drop deadline, a period is specified during which the student may withdraw from the course with the course appearing on the student's record with a grade. A student who withdraws from all courses in which he or she enrolled in a given term is considered to have withdrawn from the university for that term. For each graduate course in which a student is doing passing work (C or better in a graduate course) at the time of withdrawal, as assessed by the instructor, a WP will be received; for any course in which the instructor determines that the student is not doing passing work, a WF will be received. If the instructor does not make an assessment of whether the student is passing or failing, a WP will be received. Grades of WP and WF are not included in the computation of the graduate GPA. Grades assigned in connection with withdrawals from undergraduate courses will be W or F in accordance with the undergraduate grading system; the withdrawal procedures and deadlines, however, will be those applicable to graduate-level students and courses.
Students who fail to notify the Graduate School in writing of their intent to withdraw from the university, when required to do so according to the Schedule of Classes, or who fail to withdraw from a course or from the university in accordance with established procedure and by the established withdrawal deadline, may receive an F in any affected course(s). If withdrawal is accomplished early enough in the term, there may be reduced liability for tuition and fees under the university's refund policies, as described in the Schedule of Classes. Later withdrawal may leave the student wholly liable for tuition and fees. Questions about billing and refund policies should be directed to the Bursar's Office.

Continuous Enrollment

Most students, both full- and part-time, prefer to pursue an advanced degree without interruption in time. Those students who interrupt their studies should especially note the maximum time period allowed to fulfill all requirements for the degree sought. (See the sections entitled "Limitation of Time" elsewhere in this catalog.)

Students availing themselves of the services of the academic staff or the facilities of the university in any way that directly or indirectly relates to fulfilling degree requirements or receiving course credit must be enrolled. For example, a student must be enrolled in the term in which a comprehensive examination is taken. Also, once a student has begun work on a thesis, dissertation, or similar activity under course number 599 or 699, it is expected that such work progress each academic term, and enrollment must be continuously maintained in course number 599 or 699 until a final grade is received for the activity and the required documentation of the activity is formally approved by the Graduate School, unless a leave of absence is obtained, as described in the section "Requirements for Graduate Degrees." If such continuous enrollment in courses numbered 599 or 699 is not maintained, and a leave of absence is not granted, then upon recommendation of the department the student is subject to termination of admission to the program. This will also result in termination of admission to the Graduate School unless the student has been admitted to another graduate program.

A student is not required to be registered in the term of graduation, simply in order to graduate, if the student is not otherwise required to enroll under the policies of the previous paragraph. However, in order to make use of academic or nonacademic services of the university, a student is generally required to be enrolled for the corresponding term.

Grading System

The graduate grade point average (GPA) is computed by dividing the total number of grade points earned by the total number of credit hours that a student has taken in NIU courses earning grade points. The GPA-computation procedure is the same whether the GPA being calculated is a cumulative (overall) GPA, a GPA for a single term, or the GPA for the student's major program. In no case are either NIU courses taken for undergraduate or law credit or transfer courses included in the computation of the graduate GPA.

Grades and their grade point values are as follows.

<table>
<thead>
<tr>
<th>Grades Earning Graduate Credit</th>
<th>Grade Points Per Semester Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>S (Satisfactory)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grades Not Earning Graduate Credit</th>
<th>Grade Points Per Semester Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
<tr>
<td>U (Unsatisfactory)</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Other Transcript Entries

(1) (Temporary Incomplete)
(2) (Permanent Incomplete)
WP (Passing at time of withdrawal)
WF (Failing at time of withdrawal)
O (Audit; no grade and no credit)
OW (Unsatisfactory Audit; requirements not completed)
NR (Grade temporarily not reported)
NG (Grade permanently not reported)

An NR is recorded when an instructor submits the grade roll for the section after the deadline for reporting grades at the end of the term or when a grade is not submitted for a particular student in a course. The NR symbol may be changed to a grade specified by the instructor. A student may not graduate with a grade of NR on his or her record if the resolution of such a grade could render the student ineligible for graduation, whether or not the course involved is part of the student’s official program of courses. If the instructor does not change the NR to a regular letter grade before the end of the term following that for which the NR was issued, the NR will be recorded permanently as NG. An NG is not counted in the computation of the grade point average. The NG symbol may not be subsequently changed to a regular letter grade. A student wishing credit in a course for which NG has been recorded must register again and complete the requirements then stipulated.

The Graduate School grading system applies to graduate courses to all graduate students and students-at-large.

Students doing less than satisfactory work will be assigned the grade of D, F, or U. Graduate credit is given only for those courses in which a grade of S, C or better, is earned.

If eligible, undergraduate students may, with Graduate School approval, register for graduate course work for graduate or undergraduate credit; see "Undergraduates in Courses for Graduate Credit" and "Undergraduates in Graduate Courses for Undergraduate Credit." Undergraduate students taking a course for graduate credit will be graded according to the Graduate School grading system; undergraduates taking a graduate course for undergraduate credit will be graded according to the undergraduate grading system; graduate students taking a course for undergraduate credit will be graded according to the undergraduate grading system, except that graduate procedures and deadlines apply to grades of I or NR.

Pass/fail grading does not exist in the graduate grading system at NIU. Therefore, a graduate-level student may not elect to be graded on a pass/fail basis in a course carrying graduate credit. A graduate-level student may elect the pass/fail option in undergraduate courses; however, this option may not be used in required undergraduate deficiency courses identified in a graduate student's letter of admission, on the student's program of courses, or in the program requirements as described in the Graduate Catalog, and it may not be used in ENGL 451, ENGL 452, or ENGL 453 if the student whose native language is not English is required to take any of these courses. Graduate students and students-at-large may not audit or elect to complete computer science courses on a pass/fail basis without obtaining prior permission from the Department of Computer Science. Some

1 See following section on "Incompletes."
Incompletes

When special circumstances prevent a student’s completing the requirements of a course, the instructor may, at her or his discretion, direct that the symbol I (indicating temporary incomplete) be entered in the student's record. When the I is assigned, the instructor will file in the departmental office a statement of the work to be completed and will set a deadline for the student to fulfill this requirement. In no case may the deadline be later than the end of the next term, including the summer session as one term, after the term for which the incomplete had been assigned.

The incomplete must be removed within the following term (including summer session) whether or not the student is enrolled. If an extension in time is required to remove an I, an extension of up to one term may be granted on the recommendation of the instructor and with the approval of the office of the dean of the Graduate School. Only one such extension per course may be granted.

If the student does not submit all required work by the deadline established, the instructor may assign a grade that is consistent with the work completed and the grading standards of the course. If the instructor does not change the incomplete to a regular letter grade within the period allowed for resolution, the incomplete (I) will be converted to a permanent incomplete (IN). An IN is not counted in the computation of the grade point average. The IN symbol may not subsequently be changed to a regular letter grade on the basis of additional work submitted after the deadline for resolution of the temporary incomplete. A student wishing credit in a course for which an IN has been recorded must enroll in the course again and receive a grade based upon performance in the course during this enrollment.

Incompletes in courses numbered 599 and 699 (thesis, dissertation, and analogous courses) are exempt from the above regulations. These incompletes must be removed by completing the specific work, and by receiving a grade reflecting this work, in accordance with the “Limitation of Time” indicated for each degree program. A student transferring out of a thesis or dissertation program (or other program requiring course 599 or 699) may, at the discretion of the major department, receive credit for some or all of the work already conducted under course number 599 or 699; otherwise, any grades of incomplete (I) in 599 and 699 will be changed to IN (permanent incomplete).

A student may not graduate with a grade of I (temporary incomplete) on his or her record if the resolution of such a grade could render the student ineligible for graduation, whether or not the course involved is part of the student's official program of courses.

Grade Appeals

A graduate-level student may formally appeal a semester grade alleged to have been assigned capriciously. The definition of capricious grading is limited to (a) the assignment of a grade to a particular student on some basis other than performance in the course, (b) the assignment of a grade to a particular student by more exacting or demanding standards than were applied to other students in that course, or (c) the assignment of a grade by a substantial departure from the instructor's standards announced during the first fourth of the term. A grade appeal may not be based upon the judgment of an instructor in assessing the quality of a student's work. A description of procedures governing the appeal of allegedly capricious semester grades for graduate-level students may be obtained from the ombudsman, department offices, college offices, and the office of the dean of the Graduate School.

Instructor Responsibility

An instructor of a graduate course shall inform the enrolled students of the basis for assigning final grades in the course, within the first fourth of the course. In courses other than those involving one-to-one mentorship, this information should be provided in writing and should include a brief description of those assignments, examinations, and other required academic activities that will contribute to the course grade, and the weight to be given to each activity's contribution to that grade. Where possible, the instructor may also indicate the level of academic performance that will earn specific course grades. If, this early in the course, there is uncertainty in the assignments to be given, this should be clearly indicated.

In courses where the academic activity is individually arranged between a student and an instructor—such as thesis or dissertation research, independent study, or individual instruction in music performance or studio art—course expectations should be explained to the student within the first fourth of the course.

Academic Standing

To remain in good academic standing a graduate student must maintain a minimum GPA of 3.00 in all graduate courses required on the student's program of courses as well as in all graduate courses taken. The GPA is computed on a cumulative basis, by dividing the total number of grade points by the total number of credit hours that a student has taken in courses earning grade points. The GPA includes any course work taken at NIU for which a student earned graduate credit, but not graduate work taken at other institutions that is accepted toward meeting the requirements of an NIU graduate degree or certificate. Courses in which a student has received I, IN, NG, NR, O, OW, S, WF, or WP are not included in this computation.

Following any academic term at the end of which the cumulative graduate GPA falls below 3.00, the student will be considered on academic probation. A student on academic probation who fails to bring the GPA to the required level of 3.00 upon the completion of an additional 9 semester hours of graduate work, excluding S/U course work but including course work for which a grade of IN or NG has been recorded, or upon enrollment in any course work in 3 subsequent terms, will be academically dismissed from the Graduate School. A student on probation who has registered for but not completed 9 or more such additional semester hours, or has enrolled in three terms following the term for which the student
was placed on probation, will not be permitted further registration until all grades of I and NR have been removed and the student has achieved good academic standing.

A graduate student or student-at-large who is on academic probation may not carry an overload. A graduate student who has been academically dismissed from the Graduate School may not register as a student-at-large.

A graduate-level student who has accumulated 8 or more semester hours of grades of D, F, U, or WF in graduate course work at NIU will be academically dismissed from the Graduate School, regardless of the student's GPA.

A graduate student who fails to maintain a GPA of 3.00 in his or her required program of courses for a particular degree may, upon recommendation of the department or program, be subject to termination of admission to that degree program.

A student-at-large must maintain a GPA of at least 3.00 in all graduate course work to be in good academic standing and is subject to the provisions of probation and dismissal as described above.

Although undergraduate course work is not included in the computation of the graduate GPA, it is also expected that graduate students achieve certain levels of competence in undergraduate courses pertinent to their graduate studies at NIU. If a graduate student fails to earn a grade of C or better in an undergraduate course specified as a deficiency course for the student's program, or in course work in English that is required as a consequence of the mandatory testing of English-language proficiency of students whose native language is not English, then upon the recommendation of the department, the student's admission to the corresponding degree program will be terminated. Some programs have higher performance expectations for undergraduate deficiency courses, which may be specified in this catalog or in the student's letter of admission to the Graduate School.

Graduate assistants shall be graduate students in good standing on the effective dates of their appointments. Assistants will have their appointments terminated if during the term of their appointments they (1) are academically dismissed or (2) fail to achieve good standing after one semester (excluding summer session) on probationary status. Any deviation from termination due to probationary status is possible only upon request of the major department and approval of the office of the dean of the Graduate School.

A student must be in good academic standing overall and in the degree program in question to be eligible for graduation.

**Academic Reinstatement**

A graduate student or student-at-large who has been academically dismissed may petition for academic reinstatement. Such petitions are acted upon by the Graduate Council Appeals Committee. To submit a request for reinstatement, or for more information about the appeals process, the dismissed student should contact the office of the dean of the Graduate School.

Graduate students or students-at-large who have been academically dismissed from NIU, and who have been absent from the university for ten years or longer, may request consideration for reinstatement under the returning graduate student/student-at-large reinstatement policy. The cumulative GPA of a student reinstated under this policy will be based only on course work attempted after the date of reinstatement. The reinstated student will be considered to be on final academic probation. If upon completion of 9 or more semester hours of graduate-level course work (exclusive of course work graded on an S/U basis but including course work in which a grade of IN or NG has been recorded), or upon enrollment in any course work in three subsequent terms, the new cumulative GPA is below 3.00, a final academic dismissal will be issued to the student.

The student's status upon reinstatement will be governed by that held at the time of dismissal (i.e., graduate student or student-at-large) and prevailing Graduate School policy on reentering graduate students. A former graduate student reinstated to the Graduate School under this reinstatement policy must apply, or reapply, for admission to a desired degree program. All university regulations and program requirements in force at the time of reinstatement will apply to the reinstated student.

**Graduate Council Appeals Committee**

The Graduate Council Appeals Committee is authorized to review requests for exceptions to certain rules and certain kinds of appeals. The committee does not hear grade appeals, for which a separate procedure exists. Its primary authority lies in the sphere of Graduate School regulations—for example, admission, matriculation, and retention—but in special cases it may serve as an appellate body for academic matters deriving from the rules and practices of the departments and colleges. One major function of the committee is to review petitions for academic reinstatement from graduate students and students-at-large who have been academically dismissed. It will not review academic decisions that are based upon the disciplinary expertise of faculty in a particular field—for example, judgments of whether or not a student has passed a comprehensive examination, or whether or not a student who meets the university's minimum requirements should be admitted to the Graduate School to pursue a particular program. However, it may examine the equity of the process(es) by which such academic decisions have been arrived at. Similarly, if a student has requested an exception to a regulation (e.g., policy, procedure, deadline) at the appropriate level (departmental, college, etc.) and the request has been denied, the Appeals Committee may be asked to review the case only to the extent that the denial is alleged to be "capricious"—that the appellant's request was handled in a fashion substantially different from those of other students in similar situations.

A student wishing to bring some matter before the Graduate Council Appeals Committee should address a written request to the office of the dean of the Graduate School.

**Dual Credit for Graduate Course Work**

For a student pursuing a doctoral degree at NIU after completing one or more master's degrees at NIU, an unlimited number of semester hours of graduate work from those prior NIU programs may be applied to meeting the credit-hour requirements of the doctoral program, provided that the NIU course work was not applied to meeting requirements of a graduate degree at another institution. However, any NIU graduate work already applied toward two graduate degrees (whether at NIU or elsewhere) may not be applied also toward doctoral program requirements. Also, a maximum of 9 semester hours of NIU course work that has been applied toward meeting graduate degree requirements at another institution may be used in an NIU doctoral program. The doctoral program in any case must conform to all other applicable requirements, including approval of the department and the Graduate School. For limitations on graduate transfer work acceptable in doctoral programs, see “Student-at-Large, Study-Abroad, and Transfer Credit” in the doctoral requirement section of this catalog.

Any other student who pursues two distinct graduate degrees at NIU, either simultaneously or consecutively, may have up to 9 semester hours of graduate course work accepted for credit in both degree programs. A student who pursues a master's or Ed.S. degree at NIU after completing a graduate degree at another accredited institution may have up to 9 semester hours of graduate course work used in that other degree program accepted for credit in the NIU degree program, whether the courses were taken at NIU or at the other institution.
In taking advantage of these provisions, the student must complete all the stated requirements for each degree. Further, the course work applied to each degree must fall within the prescribed limitation of time for that degree. The written approval of the chairs of both departments involved is required when the degrees are being pursued simultaneously. For consecutive degrees, only written approval of the chair in the department where the second degree is being pursued is required. In both situations the written approval of the office of the dean of the Graduate School is required. In no case may a course be accepted for credit in more than two graduate degree programs.

Transfer Credit

With the approval of the student's department and the office of the dean of the Graduate School, some graduate courses taken at other accredited institutions may be accepted toward meeting the credit-hour requirements of a graduate degree at NIU. The student must have earned graduate credit in the course according to the institution at which the course was taken (so, for example, courses in which undergraduate credit, law credit, or other professional postbaccalaureate credit was earned cannot be accepted in transfer).

No transfer credit accepted from another institution may be in correspondence courses, which are defined as courses other than independent-study courses, delivered via any medium, that do not involve significant real-time interaction between students and faculty.

A grade of B- or better must have been earned in each graduate course accepted in transfer toward meeting NIU graduate degree requirements, and the overall GPA in all graduate transfer courses thus accepted must be 3.00 or higher. Only credit and no grade will be accepted in transfer only if the Graduate School can officially verify that the student's performance was at a level equivalent to a grade of B- or better.

To receive consideration for graduate work done elsewhere, the student must submit to the Graduate School an official transcript showing the course work in question. Transfer credit is considered to be accepted toward meeting degree requirements only at the time a student is cleared to graduate from the program.

In transfer, three quarter hours are considered to be equivalent to two semester hours. Therefore, if the graduate credit earned in a course accepted in transfer from another institution was reported in quarter hours, the transfer credit will be granted at the ration of two semester hours per three quarter hours.

Students should consult the "Requirements for Graduate Degrees" section of this catalog for more specific information on limitations on transfer credit and the combined total of transfer and other courses applicable to individual degree programs.

The Official Program of Courses

Upon receiving the official letter of admission to the Graduate School, students should plan their course selection for their first term at NIU. Care should be taken that such selections conform with the requirements of the specific program they wish to pursue in their major department.

Students are urged to consult early in or prior to their first term with their academic advisers (named in the letter of admission) to plan an official program of courses. Prior to registering each term, students should consult with their advisers for the purpose of review and approval of all course selections. The Graduate Catalog outlines the minimum course requirements for each degree program, for a student fully prepared to begin that program. The program of courses must be approved by both the student's major department and the Graduate School.

Departments may, and often do, require additional course work of individual students as necessary to address deficiencies of background or other specific needs for proper academic or professional preparation. And, a department is not obligated to accept any particular course for inclusion in a student's program of courses, whether it was taken at NIU as a graduate student or as a student-at-large, or was taken at another institution. Some degree programs also have a limitation on the amount of credit from courses taken at NIU as a student-at-large, and/or on the combined total of student-at-large and transfer hours, that may be applied toward meeting degree requirements; such limitations are described below or in individual program descriptions in this catalog.

At least 50 percent of the credit for graduate course work required on the program of courses, excluding courses identified as deficiencies, must be in the student's major. Individual degree programs may require a program even more closely focused on the major field. For a student in a doctoral program who has a master's degree, the requirement of 50 percent of graduate work in the major applies only to courses beyond the master's degree. The official program of courses to be taken for the degree should be submitted to the Graduate School for review for conformity with departmental and university requirements as early in the student's graduate studies as possible. The program of courses must be submitted no later than the graduation application deadline for the term for which the student applies for graduation. Until a student's program of courses is approved, in writing, by both the major department and the Graduate School, the student cannot be assured that the proposed plan of study will be accepted as fulfilling the degree requirements. When the program of courses has been fully approved, a copy will be sent to the student and to the adviser.

Attendance, Religious Observances, and the Academic Schedule

Students are encouraged to attend classes regularly, but individual instructors determine attendance policies for their own classes. 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 for resolution; if for any reason this route would not be appropriate, the matter may be brought to the college dean or dean's designee.

Accommodations for Students with Disabilities

A student who believes that special accommodations with respect to course work or other academic requirements may be appropriate in consideration of a disability must (1) inform the faculty in charge of the academic activity either at the start of the course or as soon as the student becomes aware of the activity or requirement in connection with which accommodation is sought, (2) provide the required verification of the disability to the Center for Access-Ability Resources, and (3) inform the latter office from which faculty member accommodations have been requested. If contacted by the faculty member, the staff of the Center for Access-Ability Resources will provide advice about accommodations that may be indicated in the particular case.
A wide range of services can be obtained by students with disabilities, including housing, transportation, adaptation of printed materials, and advocacy with faculty and staff. Students with disabilities who need such services or want more information should contact the Center for Access-Ability Resources, University Health Service, at (815) 753-1303.

Protective Standards in Research

Protection of Human Subjects

Any Northern Illinois University student or faculty or staff member who proposes to undertake research involving human subjects is required by federal and university regulations to seek approval for the project from the Graduate School’s research compliance office. Research using questionnaires, evaluations, or surveys—mailed or otherwise conducted—or involving personal interviews is included in the category of human-subjects research and must be reviewed by the Institutional Review Board or its chair. Each research project involving human subjects must receive formal approval or exemption from the Board or its chair.

The student must submit a completed departmental review form to the chair of the academic department under whose jurisdiction the research would be undertaken. The student should also ascertain from the department whether completion of the longer Application for Approval to Use Human Subjects in Research form is required. The department chair, or a designee, will review the submitted human-subjects form to determine if the project falls into a category requiring the approval of the NIU Institutional Review Board on the Protection of Human Subjects.

Departmental review forms and the Application for Approval to Use Human Subjects in Research may be obtained from most departmental offices or from the research compliance office within the Graduate School. Applicants are responsible for providing the information requested on the forms, for securing the required approval signatures, and for seeing that the completed, signed forms are received by the Graduate School. If research involving human subjects is part of a student’s degree requirements, then to ensure eligibility for graduation, the student is urged to complete these required forms as soon as possible after the topic and protocols of the research have been determined. In no case should research involving human subjects begin before all necessary institutional approvals have been given. Questions concerning human subjects review may be directed to the student’s faculty adviser or department chair, or to the research compliance office in the Graduate School.

Facilities for Experimental Animals or Recombinant DNA

A student or member of the faculty or staff who proposes to engage in research utilizing living animals or recombinant DNA should consult first with her or his academic department or the research compliance office in the Graduate School to determine the federal and university requirements for facilities in which such research subjects are to be housed and to obtain the approval forms required by the Institutional Animal Care and Use Committee or the Institutional Biosafety Committee, respectively.

Use of Radioactive Substances

A student who proposes to use substances emitting ionizing radiation must be supervised by a faculty member and must use such materials in a facility approved by the University Radiation Safety Committee; and such radioactive substances may be purchased only with the approval of the University Radiation Safety Officer.
Requirements for Graduate Degrees

The following are general university requirements for the various degree programs as established by the graduate faculty. Individual departments and programs may have established additional or more restrictive requirements, which are described in the corresponding departmental sections of this catalog. Students should consult those sections to determine such requirements and must meet all requirements specific to their own major/specialization in addition to the general requirements of the university.

Graduation

A student who intends to graduate at the end of a particular term must have submitted a completed graduation application, including the receipt for payment of the graduation fee, by the graduation-application deadline for that term. This deadline is published in the Graduate School Calendar and in the Schedule of Classes for each term. The application form must be submitted and the fee paid only once for each degree earned; each application is specific to a particular degree program.

All requirements for a graduate degree must be completed no later than the date of Commencement of a particular term in order for the student's degree to be conferred as of that graduation date. There are earlier deadlines for meeting some degree requirements; these are given in the Graduate School Calendar. It is the student's responsibility to be aware of these deadlines.

If a student applies for graduation in a particular term and fails to graduate at the end of that term, the application will automatically be transferred once, to the next academic term. If the student also fails to graduate at the end of that next term, no further automatic transfer of application will occur. Thereafter, the student must notify the Graduate School, in writing, in order to reactivate his or her application for the anticipated graduation date, and must do so by the graduation-application deadline for the expected term of graduation in order to graduate at the end of that term.

After a student has applied for graduation and it has been verified that all degree requirements have been completed, an official "certificate of completion" can be issued by the Graduate School to the student or to another party designated in writing by the student. Such a certificate is commonly accepted as proof of completion in advance of issuance of the diploma and degree transcript.

Requirements for the Degrees
Master of Accounting Science
Master of Arts
Master of Music
Master of Public Administration
Master of Public Health
Master of Science
Master of Science in Education
Master of Science in Taxation

The following regulations apply to students in programs leading to the degrees Master of Accounting Science, Master of Arts, Master of Music, Master of Public Administration, Master of Public Health, Master of Science, Master of Science in Education, and Master of Science in Taxation. The regulations for the Master of Business Administration and Master of Fine Arts degrees are in subsequent sections. Detailed requirements for specific degrees appear in the departmental sections of this catalog.

Admission

The Graduate School admission requirements for all of the above-listed master's degrees except for those in the College of Business are indicated in the section on "General Requirements for Admission to the Graduate School." The admission requirements for graduate programs in the College of Business are described in that college's section of this catalog.

There are additional admission requirements and earlier application dates for several programs; the catalog sections for individual programs should be consulted.

Credit Requirements

Students in master's degree programs must earn a minimum of 30 semester hours of graduate credit with a minimum GPA of 3.00. This average must be earned over all NIU graduate courses required in the student's program of courses (excluding deficiency courses taken for graduate credit) as well as over all graduate work taken at NIU. The minimum number of required semester hours is greater than 30 in some programs, as indicated in the respective major department sections.

Limitation of Time

The student must fulfill all requirements for a degree within the six consecutive years immediately preceding the date of the student's graduation from that degree program. This time limit applies to enrollment in all graduate course work in the student's program including work for which transfer credit is allowed.

If a course taken to complete the requirements for the master's degree does not fall within the six-year period allowed for the degree program, the student's major department may require the student to retake the course for credit or may allow the student to demonstrate current knowledge of the subject matter. In the latter case, currency must be demonstrated to the satisfaction of the department offering the course through successful completion of an appropriate examination or other assessment if available from the department. Otherwise, the outdated course work must be deleted from, and other course work must be substituted in, the program of courses. Transfer courses falling outside the limitation of time may not be used in a graduate program.

In the College of Business, the six-year time limitation for course work applies only to Phase Two courses.

Advisory System

Each student is assigned by the major department or program an adviser or advisory committee whose purpose is to guide the student's program and recommend him or her for the degree when the student is properly qualified.

The official program of courses is formulated by the student in consultation with the assigned adviser or advisory committee. This
program should be submitted to the Graduate School for review and approval as early as possible. It must be submitted no later than the graduation-application deadline of the term for which the student expects to graduate from that degree program. When the program of courses has been approved by the Graduate School, a copy will be sent to the student and to the advisor. Any changes subsequently made to an approved program must also be submitted to and approved by the Graduate School.

Courses for Which Graduate Credit is Allowed

At NIU only courses which are numbered 400-499, 500-599, and 600-699 carry credit toward the master's degree. At least 50 percent of the minimum number of semester hours required for the master's degree in the student's major (or specialization, if any) must be earned in courses numbered 500 and above.

Some courses numbered in the 400s carry only undergraduate credit. See "Graduate Credit for 400-Level Courses."

Northern Illinois University does not offer correspondence courses, which are courses other than independent-study courses that do not involve significant real-time interaction between students and faculty, when such interaction would normally be a part of the same course offering on campus.

Student-at-Large, Study-Abroad, and Transfer Credit

With the approval of the student's major department and the office of the dean of the Graduate School, a maximum combined total of 15 semester hours of credit for courses taken for graduate credit that are accepted in transfer from other accredited institutions, plus NIU graduate courses taught outside the United States, may be counted toward meeting the requirements for an advanced degree. Some degree programs also have limitations on the amount of credit from courses taken at NIU as a student-at-large, and/or on the combined total of student-at-large, study-abroad, and transfer hours that may be applied toward meeting degree requirements; such limitations are described below or in individual program descriptions in this catalog.

In the School of Music no more than 6 semester hours of transfer credit may be counted toward meeting the requirements for a master's degree. In the School of Nursing no more than 9 semester hours earned from courses taken as a student-at-large may be applied to the master's degree. In the School of Art no more than 9 semester hours of transfer credit may be counted toward meeting the requirements for a master's degree, and in the School of Theatre Arts, no more than 9 semester hours of transfer credit may be counted toward meeting the requirements for a master's degree. For students pursuing the M.S.Ed. degree in special education or counseling, no more than 9 semester hours of transfer and student-at-large credit in combination may be applied to the master's degree.

The above semester-hour limits may be exceeded on a program of courses only by the use of transfer courses and only if the total number of semester hours required on the program of courses exceeds the minimum requirements for that major (and specialization, if any) by at least the same number of hours.

Language and Research-Tool Requirement

Certain departments require proficiency in a foreign language or a research tool for the master's degree. The departmental sections of this catalog should be consulted for such requirements. If applicable, proficiency in these skills is determined in the same fashion as described under "Requirements for Doctoral Degrees," unless specified otherwise in the program descriptions in this catalog.

Comprehensive Examination

Successful completion of a comprehensive examination is required in all master's degree programs described in this section except the M.A.S., the M.S.Ed. in counseling, and the M.S. programs in finance, in management information systems, and in nursing. The comprehensive examination may be either written or oral, or both, at the option of the department. These examinations are given by the major department. The number of semester hours of course work which a student must complete before taking this examination shall be determined by the department. A student planning to take a comprehensive examination may be required to file a letter of intent with his or her department, and should consult the department concerning applicable procedures and deadlines for such notification.

A student must be enrolled in the term in which a comprehensive examination is taken. A student must be in good academic standing, both overall and in the degree program, to be eligible to take this comprehensive examination. The department may allow a student who fails this examination to repeat it after a period of time determined by the department. A student who fails this examination a second time, or is not permitted a second attempt, will not be permitted to continue work toward the master's degree in that program, and admission to that program will be terminated.

If the comprehensive examination is to be given to a group of students rather than being scheduled individually for each student, the department should post notices of the date, time, and place for each examination at least two weeks before it is to be administered.

Thesis

The thesis will be a scholarly contribution to knowledge. Its subject must be in the area of the student's major and be approved by the student's thesis director or thesis committee. The thesis presents research that has been conducted under the supervision of a graduate faculty member approved as the thesis director. The document may not have been published previously, and the research must be successfully defended in an oral examination.

In special situations, and only with the approval of the faculty director(s) and committee(s), students may collaborate on some aspects of the work contributing to their theses. However, each thesis submitted to the Graduate School for approval must be a unique product with the degree candidate as the sole author and with due acknowledgement of the contributions of collaborators; and the author must demonstrate to his or her committee satisfactory command of all aspects of the work presented.

A student intending to write a thesis should identify a prospective faculty director for the thesis, who must be willing to serve as thesis director, meet Graduate School qualifications, and be approved by the department. The thesis director and thesis committee will judge the acceptability of the work. A faculty member may decline to serve as director of any particular thesis project, in which case the department will assist the student in seeking a thesis director. If a student, with department approval, changes thesis director, the student may need to undertake additional work, or to change research projects, in accordance with the expectations and expertise of the new thesis director.

When thesis research involves human subjects, experimental animals, recombinant DNA, or the use of radioactive substances, special approval is required before the research is undertaken, as explained under the heading "Protective Standards in Research."

A student who has formally begun the thesis or its equivalent must register in course number 599 in each subsequent term until the thesis or equivalent is submitted to and formally approved by the Graduate School. Registration for this purpose may be in absentia. If circumstances prohibit continuing progress on the work, a graduate student may request a leave of absence from the office of the dean of the Graduate School. If a student interrupts
registration in a course numbered 599 without obtaining a leave of absence, then, upon recommendation of the major department, the student’s admission to the degree program will be terminated. After a student has registered for the maximum number of hours of credit that can be earned in a course numbered 599, he or she should register as an auditor in 599 each term until the thesis or equivalent receives final Graduate School approval.

A student following a thesis program shall submit three copies of the thesis and four abstracts thereof, after approval by the appointed departmental committee. The thesis must be submitted according to the instructions in *The Graduate School Manual for Theses and Dissertations*, available at campus bookstores, and must be approved by the Graduate School. Art documentations and music recital tapes are treated much like theses, as explained in that manual.

A student must be in good academic standing, both overall and in the degree program, to be eligible to submit a thesis or other final product of a course numbered 599 for review and acceptance by the Graduate School.

Any student using the services of the academic staff or the facilities of the university must be registered for the period during which the services are rendered or the facilities are used.

After the thesis has received final Graduate School approval, the three approved copies are distributed one each to the Founders Memorial Library, the University Archives, and the student’s major department.

**Composition of Examination and Thesis Committees**

The thesis committee and the final comprehensive examination committee shall each consist of at least three members. The majority of the committee must be regular faculty members at Northern Illinois University; a majority must be members of the graduate faculty; and the chair must be a graduate faculty member in the student’s major department.

**Application for Graduation**

When nearing completion of requirements for a graduate degree, a student must submit an application for graduation to the Graduate School. See “Graduation.”

**Requirements for the Degree Master of Business Administration**

The M.B.A. program is designed to serve business and other organizations by preparing students to be leaders. The themes of a global view of business, leadership, ethics, and communication are important and integral parts of the program. The M.B.A. program consists of two phases. Phase One course work is considered to be the foundation for Phase Two graduate course work. Phase One consists of a maximum of 18 semester hours and Phase Two consists of a minimum of 31 semester hours. The Phase One foundation courses consist of nine 2-semester-hour courses which will be included in a student’s program of study unless she or he has earned a C or better in corresponding undergraduate courses or a B or better in equivalent graduate courses elsewhere, or has passed the first and only attempt of the Phase One exemption examinations. Electives within Phase Two consist of a minimum of 9 semester hours and can be used to complete an area of study in finance, management information systems, international business, marketing, strategic management, or a general area of study. The general area of study consists of graduate courses either inside or outside the College of Business. Prior approval must be obtained from the graduate studies in business office for courses taken outside the College of Business for inclusion in the general area of study.

**Admission**

Admission to the M.B.A. program is competitive and limited to those who can demonstrate high promise of success. The College of Business considers several indicators of success including, but not limited to, previous academic accomplishments, demonstrated leadership, communication skills, letters of recommendation, and scores on the verbal and quantitative sections of the GMAT. All candidates are expected to have some minimal competencies in computer, mathematics, and communications skills. The College of Business requires other material in addition to that required by the Graduate School for the admission process. Contact the Office of Graduate Studies in Business for details.

**Credit Requirements**

For those with the minimum competencies mentioned above but without prior preparation in the business area, the M.B.A. may require a maximum of 48 semester hours. However, an individual student’s program may require fewer semester hours depending on the student’s previous education in business and economics.

In addition to maintaining a minimum GPA of 3.00 in all graduate course work completed in the program at NIU, the student must maintain a minimum GPA of 3.00 in all graduate course work completed in Phase Two.

For detailed information concerning this program see the College of Business section of this catalog.

**Limitation of Time**

The student must fulfill all Phase Two requirements for the M.B.A. within the six consecutive years immediately preceding the date of the student’s graduation from that degree program. This time limit applies to all Phase Two graduate course work in the student’s program including work for which transfer credit is allowed.

If a course taken to complete the requirements of Phase Two does not fall within the time limitation indicated in the preceding paragraph, the student may be required to retake the course for credit or may be allowed to demonstrate current knowledge of the subject matter. In the latter case, currency must be demonstrated to the satisfaction of the department offering the course through successful completion of an appropriate examination or other assessment if available from the department. Otherwise, the outdated course work must be deleted from, and other course work must be substituted in, the program of courses. Transfer courses falling outside the limitation of time may not be used in a graduate program.

**Advisory System**

Each student is assigned an adviser who will guide the student’s selection of courses and recommend the student for the degree when the student is properly qualified.

The official program of courses is formulated by the student in consultation with the assigned adviser. This program should be submitted to the Graduate School for review and approval as early as possible and no later than the graduation-application deadline of the term for which the student submits a completed application for graduation. When the program of courses has been approved by the Graduate School, a copy will be sent to the student and to the adviser. Any changes subsequently made to an approved program must also be submitted to and approved by the Graduate School.

**Courses for Which Graduate Credit is Allowed**

At NIU only courses which are numbered 400-499, 500-599, and 600-699 carry credit toward the master’s degree. See “Graduate Credit for 400-level Courses.” No more than 6 semester hours of
credit earned in courses numbered 400-499 may be applied to Phase Two of the M.B.A. program.

Student-at-Large and Transfer Credit
Students-at-large are normally prohibited from registering for graduate business courses.

The total Phase Two credit accepted in transfer from other accredited institutions may not exceed 9 semester hours. The total Phase Two credit earned from NIU graduate study-abroad courses may not exceed 9 semester hours. The Phase Two combination of transfer credit and credit earned from NIU graduate study-abroad courses may not exceed 15 semester hours. These semester-hour limits may be exceeded on a program of courses only by the use of transfer courses and only if the total number of semester hours required on the program of courses exceeds the minimum requirements for that major by at least the same number of hours.

Application for Graduation
When nearing completion of requirements for a degree, a student must file an application for graduation with the Graduate School. See "Graduation."

Requirements for the Educational Specialist Degree
The purpose of the Ed.S. degree program is to permit students to attain greater mastery of their chosen fields than they can attain in formal study through the master's degree level.

Admission
For admission to the Educational Specialist (Ed.S.) degree program, an applicant must have a minimum GPA of 3.20 in graduate work at the master's level and hold a master's degree or equivalent from an accredited institution or be in the last term of work leading to the master's degree at NIU.

Credit Requirements
A student in the Ed.S. degree program must earn a minimum of 30 semester hours beyond the master's degree, with at least a 3.00 GPA in the degree program (excluding deficiency courses taken for graduate credit) as well as in all graduate course work taken at NIU. The Department of Leadership and Educational Policy Studies section of this catalog should be consulted for other requirements.

Limitation of Time
The student must fulfill all of the requirements of the Ed.S. program within the six consecutive years immediately preceding the date of the student's graduation from that program. This time limit applies to enrollment in all graduate course work in the student's program including work for which transfer credit is allowed.

If a course taken to complete the requirements for the Ed.S. program does not fall within the time limitation indicated in the previous paragraph, the student's major department may require the student to retake the course for credit or may allow the student to demonstrate current knowledge of the subject matter. In the latter case, currency must be demonstrated to the satisfaction of the department offering the course through successful completion of an appropriate examination or other assessment if available from the department. Otherwise, the outdated course work must be deleted from, and other course work must be substituted in, the program of courses. Transfer courses falling outside the limitation of time may not be used in a graduate program.

General Requirements and Procedures
In general, the requirements and procedures for the Ed.S. degree are the same as for the Master of Arts degree detailed under the headings "Advisory System," and "Application for Graduation."

Courses for Which Graduate Credit is Allowed
At NIU only courses which are numbered 400-499, 500-599, and 600-699 carry graduate credit. See "Graduate Credit for 400-level Courses." No more than 9 semester hours of the credit counted toward the Ed.S. degree may be earned in courses numbered 400-499. Credit for at least 21 semester hours must be earned in courses numbered 500-699.

Student-at-Large, Study-Abroad, and Transfer Credit
With the approval of the student's major department and the office of the dean of the Graduate School, a maximum combined total of 15 semester hours of credit either earned in courses taken for graduate credit at other accredited institutions that are accepted in transfer, plus NIU graduate courses taught outside the United States, may be counted toward meeting the requirements for the Ed.S. degree, with a maximum of 9 semester hours of transfer credit applicable toward this 15-hour limitation.

Limitation of Time
The above semester-hour limits may be exceeded on a program of courses only by the use of transfer courses and only if the total number of semester hours required on the program of courses exceeds the minimum requirements for that major by at least the same number of hours.

Comprehensive Examination
Each student must successfully complete a comprehensive examination administered by the major department. The examination may be written or oral, or both, at the option of the department.

A student planning to take a comprehensive examination may be required to file a letter of intent with his or her department chair, and should consult the department concerning applicable procedures and deadlines for such notification.

A student must be enrolled in the term of the comprehensive examination. A student must be in good academic standing, both overall and in the degree program, to be eligible to take this examination. A student who fails this examination may, with the permission of the major department, repeat it no sooner than the following academic term. A student who fails this examination a second time, or is not granted approval for a second attempt, will not be permitted to continue work toward the degree in that program, and admission to that program will be terminated.

Thesis
The writing of a thesis or field study is optional in the Ed.S. program.

The thesis will be a scholarly contribution to knowledge. Its subject must be in the area of the student's major and be approved by the student's thesis director or thesis committee. The thesis presents research that has been conducted under the supervision of a graduate faculty member approved as the thesis director. The document may not have been published previously, and the research must be successfully defended in an oral examination.

In special situations, and only with the approval of the faculty director(s) and committee(s), students may collaborate on some aspects of the work contributing to their theses. However, each thesis submitted to the Graduate School for approval must be a unique product with the degree candidate as the sole author and with due acknowledgement of the contributions of collaborators; and the author must demonstrate to his or her committee satisfactory command of all aspects of the work presented.
A student intending to write a thesis should identify a prospective faculty director for the thesis, who must be willing to serve as thesis director, meet Graduate School qualifications, and be approved by the department. The thesis director and thesis committee will judge the acceptability of the work. A faculty member may decline to serve as director of any particular thesis project, in which case the department will assist the student in seeking a thesis director. If a student, with department approval, changes thesis director, the student may need to undertake additional work, or to change research projects, in accordance with the expectations and expertise of the new thesis director.

When such research involves human subjects, experimental animals, recombinant DNA, or the use of radioactive substances, special approval is required before the research is undertaken, as explained in the section of this catalog titled “Protective Standards in Research.”

A student who has formally begun the thesis must register in course number 599 in each subsequent term until the thesis is submitted to and formally approved by the Graduate School. Registration for this purpose may be in absentia. If circumstances prohibit continuing progress on the work, a graduate student may request a leave of absence from the dean of the Graduate School. If a student interrupts registration in course number 599 without obtaining a leave of absence then, upon recommendation of the major department, the student’s admission to the degree program will be terminated. After a student has registered for the maximum number of hours of credit that can be earned in thesis research (course number 599), he or she should register as an auditor in 599 each term until the thesis receives final Graduate School approval.

A student following a thesis program shall prepare a significant thesis which must be submitted according to the instructions in The Graduate School Manual for Theses and Dissertations.

A student must be in good academic standing, both overall and in the degree program, to be eligible to submit a thesis for acceptance by the Graduate School.

Any student using the services of the academic staff or the facilities of the university must be registered for the period during which the services are rendered or the facilities are used.

After the thesis has received final Graduate School approval, the three approved copies are distributed one each to the Founders Memorial Library, the University Archives, and the student’s major department.

Composition of Committees

The thesis committee and comprehensive-examination committee shall each consist of at least three members. The majority of the committee must be regular faculty members at Northern Illinois University; a majority must be members of the graduate faculty; and the chair must be a graduate faculty member in the student’s major department.

Requirements for the Performer’s Certificate

The purpose of the Performer’s Certificate program is to permit students to attain greater mastery of their chosen fields than they can attain in formal study through the master’s degree level.

Admission

For admission to a Performer’s Certificate program, an applicant must normally have completed work equivalent to that required for the Master of Music degree at Northern Illinois University. Other admission requirements are noted in the School of Music section.

Credit Requirements

The Performer’s Certificate program requires a minimum of 24 semester hours of credit with a GPA of at least 3.00. The minimum GPA of 3.00 must be earned over all courses required in the student’s program of courses as well as (excluding deficiency courses taken for graduate credit) as well as over all graduate courses taken at NIU. Additional information may be found in the School of Music section.

Limitation of Time

The student must fulfill all of the requirements of the Performer’s Certificate program within the six consecutive years immediately preceding the date of the student’s graduation from this program.

If a course taken to complete the requirements for the Performer’s Certificate does not fall within this time limitation, the School of Music may require the student to retake the course for credit or may allow the student to demonstrate current knowledge of the subject matter. In the latter case, currency must be demonstrated to the satisfaction of the department offering the course through successful completion of an appropriate examination or other assessment if available from the department. Otherwise, the outdated course work must be deleted from, and other course work must be substituted in, the program of courses.

General Requirements and Procedures

In general, the requirements and procedures for the Performer’s Certificate are the same as for the Master of Arts degree detailed under the headings “Advisory System,” “Courses for Which Graduate Credit is Allowed,” and “Application for Graduation.”

Student-at-Large and Transfer Credit

No student-at-large or transfer credit is accepted as part of the program of courses required for the Performer’s Certificate.

Final Recital

Each student must successfully present a final recital and should consult with the School of Music concerning applicable procedures and deadlines for this recital.

A student must be enrolled and must be in good academic standing, both overall and in the Performer’s Certificate program, in the term of the final recital to be eligible for its presentation. A student who fails to perform the final recital successfully may, with the permission of the School of Music, repeat it no sooner than the following academic term. A student who fails a second time, or is not granted approval for a second attempt, will not be permitted to continue work toward the Performer’s Certificate, and admission to that program will be terminated.

Composition of Final Recital Committee

The Performer’s Certificate final recital committee shall consist of at least three members. The majority of the committee must be regular faculty members at NIU; a majority must be members of the graduate faculty; and the chair must be a graduate faculty member in the School of Music.
Requirements for the Degree
Master of Fine Arts

The M.F.A. degree in the School of Art is primarily designed for
and directed toward students who desire to achieve a current,
high-level professional mastery in an acceptable discipline relating
to the fine arts or design. This is a terminal degree in the fields
of studio art and design.

The M.F.A. degree in the School of Theatre Arts is appropriate for
college teaching and/or entrance into the profession in the fields
of acting, directing, design, and theatre technology.

Admission

The basic requirements for admission after the completion of the
baccalaureate degree are those indicated in the section "General
Requirements for Admission to the Graduate School." Students
with an M.A. degree who wish to continue in an M.F.A. program
must have a minimum 3.20 GPA in graduate work to be admitted.

Students seeking admission to the M.F.A. program in the School
of Art or in the School of Theatre Arts should consult the
corresponding school's section in this catalog.

Students seeking admission to the M.F.A. program in the School
of Art should send slides to the graduate coordinator in the School
of Art. Other application materials are to be submitted to the
Graduate School.

Credit Requirements

A student in the M.F.A. program must earn 60 semester hours
beyond a baccalaureate degree, exclusive of work taken to remove
deficiencies, with a GPA of at least 3.00 in all graduate courses
required in the student's program of courses (excluding deficiency
courses taken for graduate credit) as well as over all graduate
course work taken at NIU.

For detailed information concerning each program see the section
of this catalog concerned specifically with the School of Art or the
School of Theatre Arts.

Limitation of Time

All requirements for the degree Master of Fine Arts must be
completed within the seven consecutive years immediately
preceding the date of the student's graduation from that degree
program. This time limit applies to enrollment in all graduate course
work in the student's program including work for which transfer
credit is allowed.

If a course taken to complete the requirements for an M.F.A.
degree does not fall within the seven-year period indicated in the
preceding paragraph, the student's major department may require
the student to retake the course for credit or may allow the student
to demonstrate current knowledge of the subject matter. In the
latter case, currency must be demonstrated to the satisfaction of
the department offering the course through successful completion
of an appropriate examination or other assessment if available
from the department. Otherwise, the outdated course work must
be deleted from, and other course work must be substituted in,
the program of courses. Transfer courses falling outside the
limitation of time may not be used in a graduate program.

General Requirements and Procedures

In general, the requirements and procedures for the M.F.A. degree
are the same as for the Master of Arts degree detailed under the
headings "Advisory System," "Courses for Which Graduate Credit
is Allowed," and "Application for Graduation."

Student-at-Large and Transfer Credit

For a student pursuing the M.F.A. degree in art, up to 30 semester
hours of course work from the M.A. program in art at NIU may be
counted toward meeting the requirements of the M.F.A. degree,
with the consent of the student's M.F.A. advisory committee. With
the consent of the School of Art, the student may be accepted toward the
M.F.A. degree in art. A maximum of 9 semester hours of graduate
credit earned at NIU as a student-at-large may be accepted toward an M.F.A. degree in art. However, in meeting the requirements for a graduate degree in art, the combined total of graduate credit accepted in transfer from other accredited institutions, plus that earned at NIU as a student-at-large may not exceed 15 semester hours.

With the approval of the School of Theatre Arts and the Office of
the Dean of the Graduate School, a combined total of up to 21
semester hours may be accepted in transfer from other
accredited institutions or earned at NIU as a student-at-large may be
applied toward the requirements for the M.F.A. degree in theatre
arts.

One-Person Show: Art

In the M.F.A. program in the School of Art, the student's work
must culminate in a one-person show, which serves in lieu of a
final comprehensive examination. Three copies of a pictorial
documentation of the show must be submitted to the Graduation
School as the equivalent of a thesis according to the instructions
in The Graduate School Manual for Theses and Dissertations,
available at campus bookstores. Additional instructions for
documentation of the show are available from the School of Art.

In special situations, and only with the approval of the faculty
director(s) and committee(s), students may collaborate on some
aspects of the work contributing to their one-person shows. However, each show documentation submitted to the Graduation
School for approval must be a unique product with the degree
candidate as the sole author and with due acknowledgement of the
contributions of collaborators; and the author must demonstrate to his or her committee satisfactory command of all
aspects of the work presented.

A student intending to prepare a one-person show should identify
a prospective faculty director for the show, who must be willing to
serve as director, meet Graduate School qualifications, and be
approved by the department. The director and committee will judge
the acceptability of the work. A faculty member may decline to
serve as director of any particular one-person show, in which case
the department will assist the student in seeking a director. If a
student, with department approval, changes director, the student
may need to undertake additional work, or to change projects, in
accordance with the expectations and expertise of the new
director.

Approval of the M.F.A. one-person show is by a majority of the
faculty committee consisting of at least three members. The
majority of the committee members must be regular faculty
members at Northern Illinois University, a majority must be
members of the graduate faculty in the School of Art, and the
chair must be a graduate faculty member in the School of Art and
an appropriate specialist in the specific discipline.

A student must be in good academic standing, both overall and in
the degree program, to be eligible to submit this documentation
for review and acceptance by the Graduate School.

Because the pictorial documentation of a one-person show is
considered equivalent to a thesis, the student must register in
ART 699B. Once registered in ART 699B the student is expected
to continue to register in ART 699B up to and including the term in which the documentation is submitted to and formally approved by the Graduate School. Registration for this purpose may be in absentia. If circumstances prohibit continuing progress on the work, the student may request a leave of absence from the dean of the Graduate School. If a student interrupts registration in course number ART 699B without obtaining a leave of absence, then upon recommendation of the School of Art, the student's admission to the degree program will be terminated. After a student has registered for the maximum number of hours of credit that can be earned for the documentation (ART 699B), he or she should register as an auditor in ART 699B each term until the documentation receives final Graduate School approval.

Final Project: Theatre Arts

A student's work in the Master of Fine Arts program in the School of Theatre Arts culminates in a final project, which serves in lieu of a final comprehensive examination. The project and a project paper must be reviewed and approved by a committee of the faculty consisting of at least three members. The majority of the committee members must be regular faculty members at Northern Illinois University; a majority must be members of the graduate faculty in the School of Theatre Arts; and the chair must be a graduate faculty member in the School of Theatre Arts.

In special situations, and only with the approval of the faculty director(s) and committee(s), students may collaborate on some aspects of the work contributing to their final projects. However, each project documentation submitted to the Graduate School for approval must be a unique product with the degree candidate as the sole author and with due acknowledgement of the contributions of collaborators, and the author must demonstrate to his or her committee satisfactory command of all aspects of the work presented.

A student intending to prepare a final project should identify a prospective project director, who must be willing to serve as director, meet Graduate School qualifications, and be approved by the school. The director and committee will judge the acceptability of the work. A faculty member may decline to serve as director of any particular final project, in which case the school will assist the student in seeking a director. If a student, with department approval, changes director, the student may need to undertake additional work, or to change projects, in accordance with the expectations and expertise of the new director.

The project may be done in conjunction with an internship. To undertake the project, the student must register for THEA 699. Registration for this purpose may be in absentia. If circumstances prohibit continuing progress on the work, the student may request a leave of absence from the dean of the Graduate School. If a student interrupts registration in course number THEA 699 without obtaining a leave of absence, then upon recommendation of the School of Theatre Arts, the student's admission to the degree program will be terminated. After a student's first enrollment in THEA 699, he or she should register as an auditor in THEA 699 each term until the project receives final approval from the school. Additional instructions about the project and the written documentation are available from the School of Theatre Arts.

Requirements for the Degrees
Doctor of Education
Doctor of Philosophy

The doctorate is the highest degree granted by the university and is conferred only for work of distinction in which the student displays powers of original scholarship and the ability to conduct independent research.

Doctor of Education (Ed.D.) degrees are offered in curriculum and instruction by the Department of Curriculum and Instruction; in counseling and educational psychology by the Department of Educational Psychology, Counseling, and Special Education; and in adult continuing education, educational administration, and instructional technology by the Department of Leadership and Educational Policy Studies. Doctor of Philosophy (Ph.D.) degrees are offered in biological sciences, chemistry, economics, English, geology, history, mathematical sciences, political science, and psychology, through the corresponding departments.

Admission

Normally a student applying for admission to a doctoral program will be expected to have completed both baccalaureate and master's degrees. A student with a baccalaureate degree may, with the approval of the department, be admitted directly into a doctoral program. No student will be admitted to doctoral work unless the undergraduate and graduate records (including test scores) indicate ability to do work of high quality in the field chosen.

For admission to a doctoral program, a student must have at least a 3.20 GPA in any previous graduate work and approval of the department in which he or she plans to major.

At least three letters of recommendation are required from persons who can write analytically about the applicant's academic qualifications and ability to do graduate work.

Admission to doctoral work in a specific department may also require passing whatever entrance tests, screening devices, or interviews are required by the individual department.

Credit Requirements

Graduate students working for a doctoral degree must complete at least 90 semester hours of work beyond the baccalaureate degree with a minimum GPA of 3.00. This will include formal course work, independent study, research, and the dissertation. The minimum GPA requirement applies to all graduate courses required on the student's program of courses (excluding deficiency courses taken for graduate credit) as well as to all graduate course work taken at NIU. Transfer credit will be allowed at the discretion of the department concerned and the office of the dean of the Graduate School, subject to the limitations described below. No more than 24 semester hours subsequent to the baccalaureate degree shall be in graduate courses numbered 400-499. Although most of the work will be in the student's major field, at the discretion of the major department some course work may be taken in related fields. The departmental sections of this catalog should be consulted for other requirements.

Limitation of Time

Except as indicated below, the student must fulfill all requirements for a doctoral degree within a specified number of consecutive years immediately preceding the date of the student's graduation from that degree program. The number of years allowed depends upon the highest degree held by the student at the time of admission to the program.

Baccalaureate degree: ten years
Master's degree: nine years
Post-master's degree: eight years

At the discretion of the student's major department, the doctoral residence requirement may be met by using course work that falls outside the limitation of time for the doctoral degree, and Ph.D. language/tool requirements may be satisfied with course work and/or examinations falling outside this time limit.

Graduate work taken as part of a previously completed graduate degree program, and additional graduate courses taken at the same institution while enrolled in that degree program, are exempt from this limitation of time. The time limit applies to enrollment in all other graduate course work in the student's program including work for which transfer credit is allowed. If any such course does not fall within the time limit defined above, the student's major...
department may require the student to retake the course for credit or may allow the student to demonstrate current knowledge of the subject matter. In the latter case, currency must be demonstrated to the satisfaction of the department offering the course through successful completion of an appropriate examination or other assessment if available from the department.

Otherwise, the outdated course work must be deleted from, and other course work must be substituted in, the program of courses. Transfer courses falling outside the limitation of time may not be used in a graduate program.

Student-at-Large, Study-Abroad, and Transfer Credit

Up to a total of 30 semester hours of transfer credit from master's degree programs completed at other accredited institutions may be applied to meeting the credit-hour requirements of the doctoral degree. A grade of B- or better must have been earned in each such graduate course accepted in transfer from a master's degree program, and the overall GPA for all such master's work accepted must be at least 3.00. In addition, with the approval of the student's committee chair, major department, and the office of the dean of the Graduate School, up to 15 semester hours of credit for NIU graduate study-abroad courses, plus courses taken subsequent to the master's degree and completed with grades of B or better from departments offering graduate programs above the master's level at other accredited institutions, may be accepted as credit toward a doctoral degree at NIU.

For a student who has not completed a graduate degree at another institution, in meeting the credit-hour requirements for the doctoral degree, the total credit transferred from accredited institutions, plus credit for NIU graduate study-abroad courses, may not exceed 30 semester hours.

The above semester-hour limits may be exceeded on a program of courses only by the use of transfer courses and only if the total number of semester hours required on the program of courses exceeds the minimum requirements for that major by at least the same number of hours.

Residence Requirement

Residence, the enrollment for a specified number of semester hours during a specified period of time, is not required for all doctoral programs. Those programs with a residence requirement state that requirement in the departmental description of the program in this catalog. Alternate procedures for meeting a program's residence requirements may be recommended by the student's advisory committee, and approved in advance by the department chair and the office of the dean of the Graduate School.

A statement of how the student intends to satisfy a program's residence requirement should be submitted to the Graduate School together with the doctoral program of courses. This residency statement must be signed by the student and the department chair. All course work applied toward meeting the residence requirement must be course work in which graduate credit was earned.

Ph.D. Language and/or Research-Tool Requirement

Specific language and/or research-tool requirements for the Ph.D. degree vary by department. These requirements may be found in the description of the doctoral program under each departmental heading.

The general Graduate School requirement for proficiency in foreign language(s) and/or research tool(s) for the Ph.D. degree may be met by one of the following.

Two foreign languages with average reading proficiency.
One foreign language with a high level of proficiency.
One foreign language with average reading proficiency and one research tool with average proficiency.

Two research tools with average proficiency.
One research tool with a high level of proficiency.

Students wishing to demonstrate average proficiency in French, German, or Spanish may do so by achieving a grade of S (satisfactory) in FLFR 382, Reading Expository French II; FLGE 382, Reading Expository German II; or FLSF 382, Reading Expository Spanish II, respectively. These courses and their prerequisite courses are described at the end of this section.

Translation examinations in these and other languages are arranged through the Office of Testing Services. Details on the nature of the foreign language examination and how it is administered are available from the Office of Testing Services.

Average proficiency in a foreign language may also be demonstrated by the possession of a degree from a college or university at which that language was the language of instruction.

Course work to be used to satisfy research-tool requirements must be approved by the student's major department and the office of the dean of the Graduate School. Unless the major department specifies a higher grade, an undergraduate grade of C or better, or a graduate grade of B or better, must be received in each such course. If course work from another university is to be applied toward meeting research-tool requirements, an official transcript showing satisfactory completion of the course(s) must be provided to the Graduate School.

Students should work closely with their advisers in coordinating efforts to satisfy the Graduate School and departmental language and research-tool requirements with their doctoral research objectives.

FLFR 381. READING EXPOSITORY FRENCH I (3). The development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of French. S/U grading.

FLFR 382. READING EXPOSITORY FRENCH II (3). Continuation of the development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of French. S/U grading.

FLGE 381. READING EXPOSITORY GERMAN I (3). The development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of German. S/U grading.

FLGE 382. READING EXPOSITORY GERMAN II (3). Continuation of the development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of German. S/U grading.

FLSP 381. READING EXPOSITORY SPANISH I (3). The development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of Spanish. S/U grading.

FLSP 382. READING EXPOSITORY SPANISH II (3). Continuation of the development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of Spanish. S/U grading.

Qualifying Examination

The student may be required, at the discretion of the major department, to take a qualifying examination. This may be written or oral, or both, testing the competence of the student in the major and related fields. The department may allow a student who fails this examination to repeat it after a period of time determined by the department. A student who fails this examination a second time, or is not granted permission for a second attempt, will not be permitted to continue work toward the doctorate, and admission...
to that doctoral program will be terminated. A student must be registered in the term in which the qualifying examination is taken.

Candidacy Examination

When students have completed most or all of the doctoral course work (except dissertation research), they will take written candidacy examinations. Departments may also require an oral examination. These examinations will cover work in the student's major department and related fields. The examining committee may allow a student who fails a candidacy examination to repeat it after a period of time determined by the committee. A student who fails a candidacy examination a second time, or is not granted permission to continue work toward the doctorate, and admission to that doctoral program will be terminated.

A student must be admitted to the doctoral program and must be enrolled in the term in which the candidacy examination is taken. A student must be in good academic standing, both overall and in the degree program, to be eligible to take the candidacy examination.

Admission to Doctoral Degree Candidacy

A student must be admitted to doctoral degree candidacy before the doctoral degree can be awarded. The student is admitted to candidacy by the Graduate School following successful completion of the candidacy examination in the student's major department and upon the recommendation of that department, which may have established additional requirements that must be satisfied before admission to candidacy is recommended.

Dissertation Requirements

The dissertation will be a substantial contribution to knowledge in which the student exhibits original scholarship and the ability to conduct independent research. Its subject must be in the area of the student's major and be approved by the student's dissertation director or dissertation committee. The dissertation presents research that has been conducted by the student under the supervision of a senior member of the graduate faculty from, and nominated by, the major department and approved as the dissertation director by the dean of the Graduate School. The document may not have been published previously, and the research must be successfully defended in an oral examination. The author must demonstrate to his or her committee satisfactory command of all aspects of the work presented.

Credit-hour requirements for the dissertation and research are determined by the major department. The dissertation is to be submitted in accordance with the Graduate School regulations found in The Graduate School Manual for Theses and Dissertations.

A student intending to write a dissertation should identify a prospective faculty director for the dissertation, who must be willing to serve as dissertation director and must be approved by the department, college, and Graduate School. The dissertation director and dissertation committee will judge the acceptability of the work. A faculty member may decline to serve as director of any particular dissertation project, in which case the department will assist the student in seeking a dissertation director. If a student, with department approval, changes dissertation director, the student may need to undertake additional work, or to change research projects, in accordance with the expectations and expertise of the new dissertation director.

When dissertation research involves human subjects, experimental animals, recombinant DNA, or the use of radioactive substances, special approval is required, as explained under the heading "Protective Standards in Research."

Once a student has begun registration in course number 699 (doctoral dissertation), the student must continue to register in course number 699 in each subsequent term until the dissertation is submitted to and formally approved by the Graduate School. Registration for this purpose may be in absentia. The designation of a dissertation adviser should be approved by the conclusion of the term in which a student first registers for 699. A student who fails to complete this procedure will, upon recommendation of the department, have all accumulated hours in the dissertation course converted to audit (no credit). After the student has registered for the maximum number of hours of credit that can be earned in dissertation research (course number 699), he or she should register as an auditor in 699 each term until the dissertation receives final Graduate School approval.

Any student using the services of the academic staff or the facilities of the university must be registered for the period during which the services are rendered or the facilities are used.

If circumstances prohibit continuing progress on the dissertation, a graduate student must request a leave of absence from the official calendar of the academic year. When a student requests a leave of absence, registration in course number 699 without obtaining a leave of absence then, upon recommendation of the major department, the student's admission to the degree program will be terminated.

After the dissertation has received final Graduate School approval, the three approved copies are distributed one each to the Founders Memorial Library, the University Archives, and the student's major department. Arrangements have also been made for all NIU doctoral dissertations to be microfilmed by University Microfilms International (UMI). The student is required to complete either the UMI microfilming contract or the UMI publish-abstract-only contract (both available from the Graduate School) and pay the applicable fee. This is a graduation requirement for all doctoral students. In most cases, the student is advised to enter into the full-microfilming contract, under the provisions of which the whole dissertation is microfilmed and made available for distribution through UMI and the abstract is published in Dissertation Abstracts International (DAI). This facilitates wide dissemination of the scholarship to other interested parties. In the event that the nature of the work is such that the student may wish to pursue its publication in unit form such as a monograph, the student may, following consultation with the major department, elect to enter into the abstract-only contract, under which the abstract alone is submitted to UMI, for publication in DAI.

Oral Defense of Dissertation

After the student has completed all other requirements for the doctorate, including the writing of a dissertation, an oral defense of the dissertation will be scheduled. The defense will consist of two parts, in either order in accordance with department policy: a public presentation with opportunity for questions from any interested parties, and a restricted examination session with the dissertation defense committee. At the discretion of the department, members of the university's graduate faculty and/or graduate students from the candidate's department may be permitted to be present at the restricted session. The examining committee will inform the dean of the Graduate School, at least two weeks in advance, of the date, time, place, and dissertation title for the public presentation, and the dean will publicize this on campus, inviting attendance of interested persons.

The presentation and defense of the dissertation are culminating scholarly activities of the doctoral program. They provide the candidate with the opportunity to present, and other interested parties the opportunity to examine and respond to, the results of the finished dissertation research. Therefore, the dissertation presentation and defense should be scheduled only when both the student and the dissertation committee are satisfied that the scholarly work and its analysis are substantially complete, and believe that they reflect a level of rigor appropriate to a doctoral degree. Further research, analysis, or rewriting may be required by the committee as a result of discussions arising during the defense.
A student must be registered in the term of the oral defense of the dissertation. A student must be in good academic standing, both overall and in the degree program, to be eligible to submit a dissertation to the Graduate School or to have a dissertation defense.

Composition of Committees

Committees to conduct the candidacy examination and the oral defense of the dissertation will be nominated by the chair of the student's major department and appointed by the dean of the Graduate School. Membership of candidacy and dissertation examining committees will include representatives of major and minor fields. The number of members on such committees normally will be three to five, and at least three are required. The majority of the committee members must be regular faculty members at Northern Illinois University; a majority must be members of the graduate faculty; and at least one-half of voting members of each committee must be senior members of the graduate faculty. A person who is not a member of the Northern Illinois University faculty may be a member, but no more than one voting member may be without NIU graduate faculty status. In addition, the dean of the Graduate School will serve as an ex officio, nonvoting member of all committees to conduct the oral defense of the dissertation. The dean or a dean's designee is to participate in both parts of the defense.

Application for Graduation

When nearing completion of requirements for a degree, a student must submit an application for graduation to the Graduate School. See "Graduation."
### Tuition and Fees

Tuition and fees are subject to change at any time. The following figures, which apply specifically to graduate-level students, reflect costs during the 1997-98 academic year and should be used only as a general guide to expenses. The official charges are those billed by the Bursar's Office for each term.

#### Fall or Spring Semester

**12 or More Semester Hours**

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**Fewer than 12 Semester Hours**

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<td>Tuition per semester hour</td>
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#### Summer Session

**12 or More Semester Hours**

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**Fewer than 12 Semester Hours**

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<th>Out-of-State</th>
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<tbody>
<tr>
<td>Tuition per semester hour</td>
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<tr>
<td>General student fees per semester hour&lt;sup&gt;1&lt;/sup&gt;</td>
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**Off-Campus, Lorado Taft Field Campus, and Workshop Courses**

Off-campus courses and those taught at the Lorado Taft Field Campus are included in the calculation of tuition charges, but are excluded from the total of semester hours. Tuition charges are applicable to the total enrolled semester hours. Off-campus courses in the M.B.A. and M.P.A. programs and some computer science courses are charged a high-tech course delivery fee ranging from $137 to $284 per semester hour. Out-of-state tuition is applicable to Lorado Taft Field Campus and workshop courses but not to off-campus hours.

**Special Fees**

- **Application fee:** $30.00
- **Orientation fee for new international students:** $125.00
- **Graduation fee (nonrefundable):** $30.00
- **Late payment fee:** $25.00
- **Off-campus course delivery fee:** $30.00 per semester hour
- **Off-campus high-tech delivery fee:** $137.00-$284.00 per semester hour
- **Transcript fee:** $5.00
- **Enrollment certification fee:** $3.50
- **Doctoral dissertation (microfilming) fee:** $50.00<sup>4</sup>
- **Nursing thesis (microfilming) fee:** $35.00<sup>4</sup>
- **Examination fees**
  - General Test of the Graduate Record Examinations
    - Paper-and-Pencil Test: $96.00<sup>4</sup>
    - Computer-Based Test: $96.00<sup>4</sup>
  - Subject Test of the Graduate Record Examinations
    - Paper-and-Pencil Test: $96.00<sup>4</sup>
  - Graduate Management Admission Test (computer-based): $125.00<sup>4</sup>
  - Special foreign language translation examinations:
    - Average proficiency: $30.00
    - High proficiency: $50.00

Class material fees, where applicable, will be billed as part of the total billing. See the current Schedule of Classes regarding those courses that require additional fees.

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<sup>1</sup>A complete listing of each fee amount and its designated use will be supplied upon request to the Office of Student Services. These fees are required of all students, unless a partial refund is warranted by study and residence more than 15 miles from campus, as defined under "Tuition and fee payment" in the Schedule of Classes.

<sup>2</sup>A health insurance fee is not charged to students during the summer session. Students enrolled in the fall semester who pay the health insurance fee will have coverage through the summer session. New students enrolling in the summer session for 6 or more semester hours may purchase the insurance.

<sup>3</sup>This fee is established by an outside agency; in the case of microfilming fees, or examinations administered through NIU, the fee is collected by NIU for transmission to that agency.

<sup>4</sup>The insurance fee is charged when a student is enrolled for 9 or more on-campus semester hours. Insurance coverage for other students, and possible refunds of the fee, are described in this catalog under "Student Medical Insurance."
Payment of Fees

It is the policy of Northern Illinois University to open a Revolving Credit Plan account for each of its students for the purpose of charging tuition and fees, room and board, textbooks and school supplies purchased through plans limited to financial aid recipients, and residence hall long-distance telephone calls. Other charges incurred by a student such as parking fines, child care fees, and pharmacy charges may be added to the student's account. These and similar charges, other debits, payments, and credits for financial aid will appear on periodic statements.

The amount due the university should be settled no later than the payment due date shown on the periodic statement. The account must be paid in full, except that qualifying students will be offered the opportunity to spread the cost of attending the university over a number of payments during an academic term. For a fall semester, there are three payments due in August, September, and October. For a spring semester, there are three payments due in December, January, and February. For a summer session, there are two payments due in May and June. Like credit card plans, the NIU Revolving Credit Plan includes the assessment of a finance charge whenever a student's account balance (new balance shown on statement) is not paid in full by the due date.

The information about the NIU Revolving Credit Plan is accurate as of August 1, 1997. This information may have changed after that date. You should contact the Bursar's Office, Northern Illinois University, DeKalb, Illinois 60115 regarding any changes to the plan.

Students should understand the important information about the NIU Revolving Credit Plan that follows.

<table>
<thead>
<tr>
<th>Annual percentage rate</th>
<th>13%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum finance charge</td>
<td>$.50 whenever a finance charge is imposed</td>
</tr>
<tr>
<td>Grace period</td>
<td>If the new balance is paid in full within 14-18 days of the statement date, no finance charge will be assessed.¹</td>
</tr>
<tr>
<td>Method of computing balance</td>
<td>Average daily balance (including current transactions during the last interest cycle)²</td>
</tr>
<tr>
<td>Late payment fee</td>
<td>$25.00³</td>
</tr>
<tr>
<td>Returned check fee</td>
<td>$25.00</td>
</tr>
</tbody>
</table>

¹ The exact number of days is determined each month by the Bursar. The payment due date will appear on each periodic statement.
² The finance charge is calculated by applying the periodic rate to the average daily balance of an account (including current transactions during the last interest cycle). The average daily balance is determined by dividing the sum of all daily balances from the interest cycle by the number of days in the interest cycle. The daily balance is computed by adding the new charges and other debits to the account’s beginning balance and subtracting any payments, credits, and unpaid finance charges for that day of the interest cycle. The interest cycle begins the day following a payment due date and continues through the next payment due date.
³ If you reside in university housing, refer to your housing contract for additional information pertaining to penalties and assessments. Refer elsewhere in this catalog for other information pertaining to your enrollment at the university.
General Student Fees

Activity and athletic fees may be used to support services and privileges such as the use of the University Health Service; use of gymnasium facilities and participation in intramural activities; admission to athletic events, concerts, dramatic productions, lectures, and speeches; and subscriptions to certain student publications. Additional charges for such services and privileges may be imposed as necessary.

Refund Policies*

In the following discussion of policies governing refunds of tuition and fees it should be understood that "refund" refers to "refund of monies paid" only in cases in which a student has already paid the full balance due. Where payment in full has not yet been made, an equivalent adjustment may be made on the total amount due. If only a partial reduction in tuition or fee liability occurs, a student who had a balance due may still owe an additional amount beyond that already paid. If no reduction in liability occurs, not only will funds paid not be refunded, but the student will be liable for the unpaid balance.

Tuition and fees, due at the time of registration, include tuition, general student fees, material fees, course delivery fees, and health insurance fees. Refunds can be applied for at the Bursar's Office, unless otherwise noted. The following provisions govern refunds of tuition and fees.

A student who has registered and officially withdraws from the university may receive a refund of tuition and fees including any advance deposit thereon, according to the following schedule.

If withdrawal is prior to the first regularly scheduled class day - all tuition and fees.

If withdrawal is within the 60 percent point in time of the period of enrollment - a refund equal to the portion of the period of enrollment remaining, rounded downward to the nearest 10 percent, less an administrative fee not to exceed the lesser of 5 percent of the tuition, fees, and other charges assessed the student or $100.00.

If withdrawal is after the 60 percent point in time of the period of enrollment - no refund shall be made.

The university may designate shorter refund periods for special courses, short courses, and other enrollments of a limited nature.

Students may receive a refund of tuition and fees if the university declares them ineligible for enrolled status prior to the first day of regularly scheduled classes.

Students who reduce the number of credit hours carried (but remain enrolled in some course work) 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 health insurance. If the number of credit hours is reduced to less than six, the student health insurance may be refunded.

Students who reduce the number of credit 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 credit hours is reduced to less than six, the student health insurance may be refunded.

Part or all of a student's tuition and fees may be refunded because of a student's death or disability, extreme hardship, or institutional error. The student, or in the event of a student's death, his or her family, must contact the Office of Student Services to request an adjustment of charges for tuition and fees and to receive a partial or full refund when university withdrawal is the consequence of one of the aforementioned circumstances. The student or his or her family will be required to provide documentation supporting the request. In the event of disability (medical withdrawal), medical documentation is to be sent to the University Health Service. In the event of a student's death, extreme hardship, or institutional error, documentation should accompany the request sent to the Office of Student Services. (Note that 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 Office of Student Services should be only for the purpose of seeking an adjustment of tuition and fees charges.)

Students who have paid tuition and fees may receive a refund if they later receive scholarships which cover tuition and fees. The application for refund must be made no later than 60 days after the close of the term.

Students enrolled in courses of study over 15 miles from the campus which require their absence from the campus for the entire semester and who are residing over 15 miles from the campus may receive refunds of activity, student bus, health service, and athletic fees. To receive such a refund, students must apply to the Bursar within the first 15 calendar days beginning with the first regularly scheduled class day. Refunds will be processed after the sixth week of the semester.

Students who receive financial assistance and withdraw from the university or reduce the number of credit hours carried may be required to repay a portion of their award(s) from any university refunds which they may have been eligible to receive. The exact amount to be repaid to financial aid accounts will be determined by the amount of aid received, the educational costs incurred, and the length of time attended during the semester.

Students enrolled in foreign study programs must adhere to the refund regulations stipulated by the Division of International Programs.

For answers to questions on tuition and fee payment refunds call (815) 753-1885, 8:15 a.m. to 4 p.m.

The above refund policies are subject to change.

Room and Board Rates

Costs for housing for 1996-97 varied from $1765 per semester for a 14-meal plan in a double room in one of the "low rise" residence halls to $2350 for a single room with a 21-meal plan in one of the "high rise" residence halls. Charges for the 1998-99 academic year are expected to increase slightly.

Room and board, tuition, and fees may be paid each semester in one payment or by a Revolving Credit Plan. Students who elect to pay on the Revolving Credit Plan will be charged an interest rate to be determined by the university. (See "Payment of Fees."
Illinois Residence Regulations

The tuition fee for in-state students is charged according to the definitions of residence below. Length of university attendance or continued presence in DeKalb during vacation periods is not considered proof of Illinois residence.

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 upon request in the Office of Registration and Records.

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.

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. 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.

Teachers. Teachers in the public and private elementary and secondary schools of Illinois are considered residents if they are employed at least one-quarter time.

International students. To be considered a resident, a student who is not a United States citizen must have “Permanent Resident” status or “Refugee” status with the U.S. Immigration and Naturalization service and must also comply with all other requirements of these regulations.

Tuition Waivers for Senior Citizens

Anyone 65 years of age or older whose annual income is less than $14,000 is eligible to take credit courses tuition free. The student must pay all general university fees and any course-related fees. Available classroom space must exist and tuition-paying students enrolled must constitute the minimum number of required students for the particular class except for credit courses designed specifically for senior citizens. Interested senior citizens should contact the Student Financial Aid Office or the Gerontology Program.
Financial Support

Assistantships

Graduate teaching assistantships, graduate research assistantships, and graduate staff assistantships are available to qualified graduate students. To be eligible for a graduate assistantship, students must be admitted to the Graduate School and be in good academic standing. Assistantship stipends vary among the units offering them, but they may be as much as $10,080 for the nine-month academic year, with a few positions exceeding this figure. Assistantships may be extended through the summer session with additional remuneration. Application forms are available from the Graduate School.

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, including graduate assistants, 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. Specific terms of employment and verification procedures must be included in the assistantship offering letter. Further information is available from the Graduate School.

In accordance with State statute, teaching assistants engaged in oral instruction in the classroom shall be persons who possess adequate competence in spoken English (unless the language of instruction is not English). For students whose native language is not English, this competence may be demonstrated by achieving a score of at least 50 on either the Speaking Proficiency English Assessment Kit (SPEAK) administered at Northern Illinois University or on the Test of Spoken English (TSE), or a higher score if required by the employing department.

State law also prohibits a person from accepting or retaining a graduate assistantship if that person is in default on the repayment of any educational loan from any public source for a period of six months or more and in the amount of $600 or more, unless a satisfactory loan repayment arrangement is made no later than six months after the start of employment.

The Rhoten A. Smith Assistantship Program has been established at Northern Illinois University to help provide graduate assistantships to minorities and white women enrolled in graduate programs in which these groups are underrepresented. The program, named in honor of the university's sixth president, represents part of the institution's commitment to increasing access to graduate education. A Rhoten A. Smith assistantship typically pays a stipend between $560 and $1120 monthly and includes a full waiver of tuition. Only U.S. citizens are eligible.

Assistantships are normally awarded to begin in the fall semester. Prospective students wishing to be considered for assistantships are urged to complete their applications for admission to the Graduate School and submit the “Application for Graduate Assistantship” form well in advance of the June 1 deadline, preferably prior to February 15, since many departments make their assistantship offers early in the spring for the following academic year. Further information should be sought from the department in which students wish to major or from any other area in which they wish to work. Students who have received provisional admission to the Graduate School, or tentative admission, early admission, or admission with stipulation, may hold an assistantship during the time of that admission status. Consult the section of this catalog on academic standing for information on how academic probation and dismissal affect assistantship appointments.

Tuition is waived, via a tuition-waiver scholarship, for students during the period of their appointment to assistantships. In addition, tuition is waived for the summer session adjacent to (preceding or following) the assistantship appointment period providing the student is an admitted graduate student during that summer.

Assistantships do not normally provide payment of students' fees. Students who hold assistantship appointments should be prepared to pay the full amount of fees in accordance with published university procedures.

A graduate assistant is obligated to provide up to 20 hours per week of service if appointed full time, up to 15 hours per week if three-quarter time, and up to 10 hours per week if half time. A student may hold two graduate assistantships for which the terms of appointment overlap only if each of the assistantships is a half-time appointment during the period of overlap.

A student who accepts and later resigns a graduate assistantship (whether or not the term of appointment has begun) may accept another assistantship only if its term of appointment begins no sooner than the start of the academic term following the effective date of the resignation or at least one month after the effective date of the resignation, whichever is the later date, unless the written consent of the former employing unit is submitted to the Graduate School. A resignation should be submitted in writing to the employing unit and to the Graduate School. The effective date of resignation is considered to be the date on which the written resignation is received by the Graduate School. For purposes of this policy the fall term is considered to begin on August 16; the spring term is considered to begin on January 1; and the summer term is considered to begin on May 16.

An appointment to a graduate assistantship shall be for a specified period of time and is accepted by the graduate assistant with the understanding that such an appointment entails no assurance or implication that it will be renewed or extended. The employing unit or the Graduate School may terminate a graduate assistantship appointment for cause, in which case it will then notify the student of this action in writing. Failure to report for work on the reporting date specified in the offering letter constitutes grounds for immediate termination of the assistantship by the employing unit, unless that unit has agreed, in writing, to a later starting date. If an assistantship appointment is terminated during an academic term, the student should expect that there will be a proration of any associated tuition waiver scholarship with a concomitant tuition payment liability. Detailed procedures for the termination of a graduate assistantship, and for appealing such termination, are available from the office of the dean of the Graduate School.

Graduate assistantships are intended to support students pursuing graduate degrees. A student may hold a graduate assistantship for not more than the one academic term immediately following graduation from a graduate degree program, unless the student is admitted to and enrolled in an additional graduate program.

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 located in Altgeld Hall 206. 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.
Fellowships and Other Awards

Graduate School Fellowships are available to a limited number of outstanding students. They pay stipends of $6,000 over ten months. Tuition (whether in-state or out-of-state) is waived for recipients via a tuition-waiver scholarship. Selection is based on academic achievement and departmental recommendation—not financial need. Recipients must enroll for 9 semester hours each semester. Students in programs other than doctoral programs are eligible. There are no application forms for Graduate School Fellowships. A student seeking nomination for one of these awards should contact the chair of her or his major department. NIU Graduate School Fellowships are awarded in the spring for the following academic year.

The Graduate School Minority/Jeffrey T. Lunsford Fellowships are awarded to superior minority students fully admitted to the Graduate School. (Provisionally admitted students, students admitted with stipulation, and students-at-large are ineligible.) These fellowships enable minority students to pursue a degree other than a doctoral degree. The stipend for this fellowship is $8,000, and the fellowship includes a tuition-waiver scholarship. Support is available only to U.S. citizens who are members of the following underrepresented groups: African Americans, Latinos, and American Indians. Awards are made by the Graduate School with the concurrence of major departments and the Graduate School Minority Fellowship Committee.

Dissertation Completion Fellowships are available for a limited number of doctoral students finishing their dissertations. These nine-month awards carry a stipend of $8000 plus a tuition-waiver scholarship and modest funds to defray the costs of the student's research. A student applies for one of these awards by submitting a dissertation research proposal to her or his major department, which may recommend the student to the Graduate School for this support.

Carter G. Woodson Scholars are outstanding minority students enrolled in full-time study in doctoral programs in which minorities are underrepresented. The Carter G. Woodson Scholars Program enables current minority teachers/scholars to undertake study for professional degrees and in the process achieve greater recognition in their fields and develop professional associations for more effective and productive academic careers. The stipend for these scholars is $14,300 per year plus a one-time $500 travel and relocation allowance; and a tuition-waiver scholarship is granted for the duration of the award. Support is available only to U.S. citizens. Awards are made by the Graduate School with the concurrence of major departments.

For information on externally funded fellowships, the graduate student should contact the Office of Sponsored Projects' Grants and Fellowships Office which has organized files on over 600 federal, state, and private funding programs, as well as on each of the internally funded programs listed above; detailed synopses of these have been compiled into a grants and fellowship directory. Individual descriptions include the name, type of support, purpose, eligibility requirements, award amounts, application information, and deadline dates of the granting institution or agency. Directories are currently available for review in the Graduate School and in each department and college office. Staff members of the Grants and Fellowships Office are available to assist students in using the directory and in preparing and submitting applications for externally based fellowships. In addition, some academic departments maintain information on external fellowship and student grant support in their specific fields of study.

Loans

Information on student loan programs may be obtained from the Student Financial Aid Office. Students should particularly be aware that their classification (graduate, student-at-large, or postgraduate) and the nature of their course load (graduate or undergraduate courses, and whether courses are taken for credit or audited) may affect their eligibility for certain types of financial assistance, and are encouraged to seek advice about their individual situation.

Federal Perkins Loan Program

Northern Illinois University participates in the Student Loan Program of the National Defense Act of 1958. Students who demonstrate exceptional need for financial assistance to commence or continue their college education may be able to borrow through this loan program up to a total of $30,000 aggregate for undergraduate and graduate study.

Borrowers at the graduate level must be full-time graduate students and must be, as determined by the university, capable of maintaining good standing in their chosen course of study. Financial need must be determined through application to the Federal Student Aid Programs.

All students applying for a Federal Perkins Loan must submit a Free Application for Federal Student Aid (FAFSA) to the address on the application, preferably by March 1 prior to the academic year financial aid is needed. In addition to submitting the FAFSA, applicants must submit the NIU financial aid verification form to the Student Financial Aid Office along with signed copies of the prior year's federal income tax returns. Application forms are available from the Student Financial Aid Office.

Federal Stafford Loan Program

Eligibility for the Federal Subsidized Stafford Loan Program is based on financial need as determined through application to the Federal Student Aid Programs. Eligible students may borrow from $100 to $8500 per year, up to a $68,500 combined undergraduate and graduate maximum.

A student applicant must be a citizen of the United States or eligible non-citizen; attending school at least half time (4.5 graduate-level semester hours or more, not including audits); capable of recognizing and accepting the responsibility of ultimate repayment of any loan indebtedness; and not in default on any previous loans and not owing a refund on any Title IV financial aid.

All applicants must file an FAFSA with the Federal Student Aid Programs. The NIU financial aid verification form must be submitted along with copies of the prior year's tax returns to the Student Financial Aid Office. Students will be notified when eligibility has been determined. Students must identify an Illinois lender by code number on the back of the NIU award notification form. If other than an Illinois lender is preferred, a separate loan application must be obtained from that lender. Application should be made by March 1 to receive priority. Loan funds will not be disbursed until the beginning of each semester.

Federal Unsubsidized Stafford Loan

A Federal Unsubsidized Stafford Loan has been established, with the same terms and conditions as the Federal Stafford Loan Program except that the borrower is responsible for paying interest which accrues during the in-school period. This program is open to students who do not qualify for fully subsidized Federal Stafford Loans. Borrowers may receive both subsidized and unsubsidized Federal Stafford Loans, totalling up to the applicable Federal Stafford Loan limit (if they do not qualify for the full amount permitted under the subsidized Federal Stafford Loan).

The maximum loan amount that can be borrowed per year through both Subsidized and Unsubsidized Federal Stafford Loan programs is $18,500 up to a total borrowing of $138,500 (including undergraduate loans) for a graduate student. The amount of the loans and all other financial aid cannot exceed the cost of education. Interest on loans must be paid every quarter while the student is in school.
Short-Term Loan Funds

The Student Financial Aid Office makes available short-term loans to students who encounter unforeseen or emergency expenses during the course of the academic year. (Students must be in good academic standing and up to date on payments to the university.) Short-term loans are not available for the payment of tuition and fees. Generally loans are made on a 30-day-repayment basis. The amount of the loan depends on the student's needs and the amount of loan funds available but generally does not exceed $100. Applications may be obtained from the Student Financial Aid Office.

Scholarships

The Student Financial Aid Office supervises the awarding of an unlimited number of scholarships funded by private donors for undergraduates. Graduate scholarships are limited. Many of the awards have specific requirements for major academic classification and grade point average. The information for private scholarships can be obtained in the Student Financial Aid Office (SFAO). Scholarship funds are disbursed in two equal amounts, half for the fall semester and the other half for the spring semester, unless the donor indicates in writing that the funds should be disbursed differently. To qualify for NIU awarded endowment scholarships, an applicant must be currently admitted as an NIU student and have a minimum 3.00 GPA. An NIU Financial Aid Application must be submitted to SFAO, and a Free Application for Federal Student Aid (FAFSA) must be mailed to the address listed on the application by March 1. Students must also submit an individual scholarship card to the SFAO (which is available from the SFAO) by April 1 prior to the academic year for which the scholarship is desired. Students will be notified by mail in June.

Student Employment

A variety of part-time employment is available to NIU students, including employment in the Federal Work-Study Program for persons who are eligible on the basis of financial need. Jobs on campus are available in many academic departments as well as in the University Libraries, the Holmes Student Center, residence halls, and university offices. All students who wish to work on campus must register through the Student Employment Office, Swen Parson 245. Assistance in finding part-time off-campus employment is also provided by the Job Location and Development Office which is located in the Campus Life Building, Room 230.

Veterans' Educational Benefits

The Veterans Assistance Office provides a liaison between the Veterans Administration and student veterans and the dependents of deceased veterans regarding their educational benefits. The office assists veterans, their widows or widowers, and their minor dependents in the processing of their applications and certification of their enrollment. Assistance is also provided when difficulties arise concerning receipt of the benefits for which students are eligible. Applications are also available for the Illinois Veterans' Grant, the Illinois National Guard Grant, and the Illinois MIA/POW Scholarship.

Incoming veterans are advised to contact the Veterans Assistance Office 60 days prior to the start of the semester to complete paperwork to receive their benefits. Veterans receiving benefits must complete a program card each semester and notify the Veterans Assistance Office of all changes in enrollment. Inquiries concerning educational benefits for veterans and their dependents may be directed to the Veterans Assistance Office, Northern Illinois University, DeKalb, Illinois 60115-2872. Telephone: (815) 753-0691. Office hours are noon-4:00 p.m., Monday through Friday, and 4-6:00 p.m., Tuesday and Wednesday when classes are in session.
Scholarly Activities at Northern Illinois University

Creative Work: Research and Artistry

Original research and artistic endeavors are integral to the intellectual life at Northern Illinois University. Members of the graduate faculty are scholars who are expected to engage in research or artistry as part of their regular responsibilities, and thus be aware of, and contribute to, advancements in their fields of expertise. Graduate students, through theses, dissertations, and other independent studies, become introduced to the processes of scholarly inquiry and expression in their academic disciplines. These activities continually confirm the university as an institution dedicated to the pursuit and transmission of knowledge, both basic and applied. The Graduate School is responsible for the general encouragement of research and artistry.

Presidential Research Professorships and Distinguished Research Professorships

The NIU Presidential Research Professorships were established in spring 1982 in recognition and support of the research and artistic mission of the university. Recipients of this award are selected on the basis of significant and sustained scholarly or creative work, including the achievement of national or international reputation in their individual fields. Up to three such professorships are granted each year, providing budgetary support and released time for research or artistic activities. After four years as a Presidential Research Professor, each of these eminent faculty members is designated a Distinguished Research Professor. Distinguished Research Professors and Presidential Research Professors are identified in the faculty listings of their respective academic departments.

Presidential Teaching Professorships and Distinguished Teaching Professorships

The NIU Presidential Teaching Professorships were established in 1991 to recognize and support faculty who excel in the practice of teaching. Recipients of this award have demonstrated over time their commitment to and success in the many activities associated with outstanding teaching. Up to three such professorships are granted each year, providing budgetary support and released time for the enhancement of their teaching activities. After four years as a Presidential Teaching Professor, each of these eminent faculty members is designated a Distinguished Teaching Professor. Distinguished Teaching Professors and Presidential Teaching Professors are identified in the faculty listings of their respective academic departments.

External Support for Research and Development

The Office of Sponsored Projects provides a wide range of assistance in the development of proposals for external project funding. The office staff is available by appointment to discuss research projects and to advise applicants concerning strategies and procedures for obtaining grant or contract support. A Grants and Fellowships Office specifically provides information on external support available for graduate students.

The Technology Commercialization Office provides assistance in the assessment and screening of new technology, and for the protection and commercialization of intellectual property through patents and licenses.

The office of the associate provost for graduate studies and research serves as the university's intellectual property office, administering institutional policies pertaining to patents, copyrights, and licensing. This office, together with the Office of Sponsored Projects and the Technology Commercialization Office, can assist researchers in dealing with such matters.

Resources for University Research and Public Service

The university maintains a wide range of research facilities, offices, and resources to facilitate a variety of research and public service activities. These include the following.

Academic Computing Services

Academic Computing Services (ACS) provides extensive support for research, instructional, and individual computer use to the university community. The environments that ACS supports include Windows 95, Windows/3.1, MacOS, MVS/Superwylbur, and Unix. Software for word processing, electronic mail, Internet browsing, statistical analysis, numerical presentation, illustration, desktop publishing, database management, and program development is generally available.

Networked personal computers in on-campus labs and dial-in facilities are available to all registered students. File servers provide the lab computers with access to office productivity, electronic mail, and web browser software. Access to the Internet is available through these labs and through the dial-in facilities. All labs have access to laser printers.

While personal computers running Windows 95, Windows, or MacOS have become the primary platform for faculty and students, there are many Unix systems on campus used for research by individuals and groups and an IBM 9672-RB4 running MVS/ESA version 5. Researchers use a variety of programming languages as well as statistical analysis software such as SAS and SPSS. ACS provides software under site licenses and volume purchase agreements to departments.

All buildings on campus are connected to the campus backbone and the Internet. In addition to walk-in or phone-in consulting, ACS also offers regular workshops and documentation on the use of computers and software on campus. For further information contact ACS.

Historical Scenic Collection

Housed in the Arts Annex of NIU's College of Visual and Performing Arts, the Lyric Opera of Chicago/Northern Illinois University Historical Scenic Collection includes elements from the settings of almost 90 operas, with an excess of 5 million square feet of painted surfaces, and represents a comprehensive depository of primary scenic materials from the American operatic theatre at the end of the 19th and beginning of the 20th centuries.

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The contents include almost the entire repertoire of operas produced by Oscar Hammerstein's Manhattan Opera Company and traces the inception, rise, and development of resident opera in Chicago, culminating with the demise of the Civic Opera Company in 1932. The collection preserves for the historian, designer, practitioner, and public a magnificent period of opera design and scene painting.

**Interdisciplinary Academic Centers and Institute**

The following centers and institute encourage and coordinate multidisciplinary research and graduate study. Each is described in the "Interdisciplinary Academic Centers and Institute" section in the back of this catalog.

- Center for Biochemical and Biophysical Studies
- Center for Burma Studies
- Center for Governmental Studies
- Center for Plant Molecular Biology
- Center for Southeast Asian Studies
- Social Science Research Institute

**Illinois Council on Economic Education**

The Illinois Council on Economic Education coordinates the continuing education activities of ten university centers for economic education throughout the state. The council's activities involve in-service and preservice teacher training in economics and the development, distribution, and evaluation of economic education materials. The council also offers services for students, adults, employee groups, and other interested community and professional groups.

The NIU regional Office for Economic Education is one of nine centers in the Illinois Council network. The NIU office provides services, materials, and consultation to school systems throughout 15 counties in northern Illinois. Thirty-six school systems in this region are formally committed to economic literacy through the EconomicsAmerica Schools Program. Graduate-level courses for teachers, workshops and awareness programs, curriculum review, and classroom materials for teaching economics are among the offerings available through the Office for Economic Education.

**Inter-university Consortium for Political and Social Research (ICPSR)**

Northern Illinois University is a member institution in the Inter-university Consortium for Political and Social Research (ICPSR). The Consortium was founded in 1962 as a partnership between the Center for Political Studies of the University of Michigan and some 190 other universities, colleges, and nonprofit research organizations in the United States and abroad. It is committed to interdisciplinary inter-university research and training for the social sciences. Its objectives are (1) to maintain archives of machine-readable social and political data sets that will serve a variety of research and training needs; (2) to develop and distribute computer-based systems for the analysis of these data sets; and (3) to conduct training in the use of quantitative methods for social science investigations.

ICPSR is based at the Institute for Social Research at the University of Michigan. A liaison office in the Social Science Research Institute (SSRI) at NIU provides a link for the campus to Consortium archives and other services. Research areas are international in scope. The data sets range from U.S. election returns and U.S. Census data to public opinion surveys. A substantial number of data files on social structure, public policy, economics, health, and political life in over 130 other countries are also available. These data sets lend themselves to comparative research, particularly on modernization processes and social change in many nations. Access to these data is generally via Superwylbur; however, some data files are now available for PC use. For detailed holdings of data available from ICPSR, faculty and students are encouraged to consult copies of the ICPSR Guide to Resources and Services that the SSRI provides to chairs of all social sciences departments on campus or the ICPSR home page on the World Wide Web at http://www.icpsr.umich.edu.

Further information regarding the ICPSR data may be obtained from the Social Science Research Institute, 753-1914.

**The Roper Center**

Established in 1946, the Roper Center is the oldest and largest archive of sample survey data in the world. The raw data and supporting documentation from thousands of individual studies, carried out in more than 70 countries, have been deposited in the center through the cooperative efforts of the world’s major survey research organizations. Center services include data set duplication, information retrieval, and computer data analysis.

Northern Illinois University is a member institution of the International Survey Library Association, which is an active partnership between the Roper Center and the academic community. This affiliation provides NIU faculty and students with access to center data services, usually at no cost to the individual.

Included in the center’s holdings are surveys by Gallup, Harris, Roper, Yankelovich Clancy Shulman, the National Opinion Research Center (NORC), the Opinion Research Corporation, CBS News/New York Times, ABC News/Washington Post, NBC News/Wall Street Journal, CNN/USA Today, Los Angeles Times, Canadian Gallup, Social Surveys LTD (Gallup) in the UK, and Brule Ville Associes in France. Questions and marginals from the surveys archived at the center can be accessed on-line and frequently the data sets themselves can be obtained.

Additional information regarding the center and access to its holdings may be obtained from the Social Science Research Institute, 753-1914.

**Regional History Center and University Archives**

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 northermost counties of Illinois, excluding Cook County. Since 1964 the center has evolved from a small university archival unit to a multi-faceted 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 particular 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 Illinois Board of Higher Education and governing board proceedings, records of university administrative offices, faculty papers, records of student government and organizations, a range of publications, and extensive photographs of campus life. The Local Government Records collection, as part of the Illinois Archives Depository system administered by the Illinois State Archives, has the responsibility of preserving local public records and making them available to researchers.

**University Libraries**

The Northern Illinois University Libraries system consists of Founders Memorial Library and branch libraries which include the Faraday Library, the Hoffman Estates Education Center Library, the Lorado Taft Instructional Materials Center, the Map Library, and the Music Library. The University Libraries collections
contain over 1.3 million volumes as well as periodicals, government publications, microforms, maps, recordings, and audiovisual materials. There is also a library located at NIU’s Hoffman Estates Education Center. In addition, the Regional History Center houses historical materials on the Northern Illinois region.

Founders Memorial Library, the main library, has five levels with 290,000 square feet of space and seating capacity for 2,200 students. The Faraday Library serves faculty and students in the disciplines of chemistry and physics. Similarly, the Music Library serves the music curriculum; the Map Library contains maps and atlases important to research in geography; and the Instructional Materials Resources Center complements the outdoor teacher education program at the Lorado Taft Field Campus. The Hoffman Estates Education Center Library services the information needs of library users at that site.

For further information, see “University Libraries” in the “Other Academic Units” section of this catalog.

University Press

The Northern Illinois University Press was founded in 1965, with the general mission of facilitating the advancement of knowledge and disseminating the results of scholarly inquiry. In carrying out its role, the press publishes both specialized scholarly work and books of general interest to the informed public. Most of its titles are in the humanities and social sciences, but it has also published in various fields of science, education, and the arts. As one of three state-supported presses in Illinois, it has an interest in publications that advance understanding of the history, nature, and culture of the region. At present, there are approximately 230 titles in print.

Decisions regarding publication are made by the University Press Board, a faculty committee made up of representatives of the colleges and the University Libraries and chaired by the associate provost for graduate studies and research and dean of the Graduate School. The main function of the board is to assure high standards of quality in all the publications of the press.

The press has been a member of the Association of American University Presses since 1972.
University Services

University Office Hours

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

Student Housing

University Residence Halls

Northern Illinois University offers several residence hall options which may appeal to graduate students attending the university. Several floors are designated for students 21 years and older and graduate students. These floors are designed for mature students and should be characterized by an appropriate study atmosphere at all times. Another option popular with graduate students is the nine-month floor where students may be in occupancy from the day residence halls open in August until graduation in May, including the vacation periods at Thanksgiving, between semesters, and in March. Twelve-month residence hall accommodations are also available. Various meal plans are available. Upon acceptance by the Graduate School, a student may apply for an assignment to a university residence hall. All university residence hall contracts are for the full academic year (August-May), and the fee includes both room and board. All assignments to university residence halls are made without reference to race, religion, or national origin.

Graduate students who want to live in a university residence hall should apply as soon as the notification of acceptance from the Graduate School has been received. Disabled students who find they may require special residence hall accommodations should contact Student Housing and Dining Services, Neptune East (753-1525).

University Family Apartments

The university has 80 apartment units for married students and single parents. These units (40 efficiency and 40 one-bedroom units) are completely furnished. Rentals cover all utilities except telephone. Because these apartments are in demand, applicants may be placed on a waiting list. Applicants and further information may be obtained from the housing office.

Off-Campus Housing

A card list of student housing (rooms, apartments, and houses) in the DeKalb area is maintained in the Office of Student Housing and Dining Services. These cards can be reviewed in the office in Neptune East but cannot be mailed.

Services

Holmes Student Center

The Holmes Student Center provides recreational facilities, informal gathering places, eating places, meeting and conference rooms, and guest rooms for members of the university community and their guests. Included are the Ellington Ballroom and Sandburg Auditorium for major performances and lectures; Diversions, a multipurpose facility for coffeehouse and club-style live entertainment; the Center Gallery, which displays art works of many student artists; the University ID Office; the Commuter Student Office for non-traditional students; a computer laboratory featuring IBM computers which are available for use by all NIU students; the Huskies Den, which offers electronic games, billiard tables, and a 16-lane bowling center; and the University Bookstore which sells textbooks, general books, school and art supplies, and personal items.

Tickets to most campus events may be acquired or purchased in the center. The facility provides coin operated copy machines, a full-service bank, and Automatic Teller Machines. Students can cash checks, study in the Student Activity Center, or relax in the television lounges. At the Holmes Center information desk, students can purchase newspapers, candy, and novelties and get directions and information on events and activities in the center. At the Campus Information Center desk, located on the main level, information is available to answer questions on university events and activities on campus and in the DeKalb area. Tours of the campus can be arranged at this desk throughout the year.

University Health Service

The University Health Service (UHS) offers a wide variety of high quality, out-patient health care services to help students maintain and improve their health. The UHS also provides health education and prevention programs as well as services for persons with disabilities. The UHS is nationally accredited by the Accreditation Association for Ambulatory Health Care and is among the elite five percent of accredited college health services. All UHS physicians have completed post-graduate medical training and are experienced specialists in a wide range of clinical areas. The UHS physicians, nurse practitioners, nurses, and professional and support staff have extensive experience in college health and are sensitive to the special needs of the college community.

All students, full- or part-time, automatically pay the University Health Service fee as part of the NIU general student fee and only need to present their valid NIU photo ID to receive services at the UHS. Students may use the UHS whether or not they are enrolled in the university’s Student Medical Insurance or a private health insurance plan. There are no charges for physician services, x-rays, most laboratory tests, physical therapy, and most other services. There are charges for medications, missed appointments, immunizations, and certain specialized medical procedures and supplies. A fee schedule is available from the UHS business office. Some of the fees are reimbursable through health insurance plans.

The UHS clinical areas and services include the following:

Acute Care Clinic—provides care and initial assessment for most illnesses and injuries, including sports-related injuries, and some minor surgery.

Allergy Clinic—provides allergy injections.
Center for Access-Ability Resources (CAAR)—provides advocacy and support services for students, faculty, and staff with a variety of disabilities and other special needs.

Gynecology—provides private personalized care in the area of women's health with emphasis on prevention and self-responsibility.

Health Enhancement Services (HES)—the wellness program for NIU students, provides information, workshops, presentations, and services to promote health and prevent disease.

Laboratory—provides a full range of laboratory testing when ordered by a UHS physician.

Medical Clinic—provides assessment and treatment of chronic and acute medical conditions.

Nutrition counseling—counseling regarding general nutrition, weight management, eating disorders, and nutritional management for medical conditions such as diabetes.

Pharmacy—fills prescriptions from any physician, dentist, or oral surgeon.

Physical therapy—provides rehabilitation and treatment for acute injuries and chronic disabilities upon physician referral.

Preventive medicine—provides immunizations, tuberculosis testing and preventive therapy, anonymous HIV testing, sexually transmitted disease counseling, health related travel services, and contagious disease reporting and follow-up.

Psychiatry—provides individual out-patient psychiatric assessment, follow-up, and/or referral.

Radiology—performs general diagnostic x-rays ordered by UHS physicians.

Self-Serve Cold Stop—a self-care service which allows students to quickly assess and evaluate cold-like symptoms.

Appointments are not required in the Acute Care Clinic. Appointments are required in the Allergy Clinic (815-753-9760), Gynecology (815-753-9728), Medical Clinic (815-753-9594), and Psychiatry (815-753-1315). There is a fee for missed appointments that are cancelled at least one hour prior to the scheduled appointment time. A 24-hour cancellation notice is required for appointments in Psychiatry, Radiology, and minor surgical procedures in Gynecology. If unable to call to keep a scheduled appointment, students should call the 24-hour appointment cancellation line, (815) 753-9594, to cancel.

The UHS does not pay for medical care received elsewhere; students are responsible for payment. This policy applies both to students who have been referred by the UHS for specialty consultation or care and to students who require care in an emergency or when the UHS is closed. Students are advised to check their health insurance coverage to determine if a portion of these expenses are reimbursable.

The university offers a separate student medical insurance plan; phone (815) 753-0122 for more information. For additional information regarding the UHS, call (815) 753-1311.

Student Medical Insurance

Students who register for 9 or more on-campus semester hours by the 15th calendar day of the semester are automatically assessed the fee for student medical insurance on their tuition account through the Bursar's Office. The student medical insurance plan provides coverage for hospitalization and/or medical treatment for accidents and illnesses.

Students enrolled for 6-8 on-campus semester hours and students enrolled for at least 6 off-campus semester hours may elect to purchase student medical insurance. Students wanting this option must come in person to the Student Insurance Office within the first 15 calendar days of the semester to enroll for coverage. Premium rates for students taking on- or off-campus classes are available through the Student Insurance Office.

All international students are required to carry the student medical insurance. These students are automatically charged the fee for student insurance when they register for at least one on-campus hour.

Eligible dependents of insured students, including spouse, domestic partner, and unmarried children under 19 years of age, may also be insured. The insured student may apply for dependent coverage at the Student Insurance Office within the first 15 calendar days of the semester. Students who cancel their coverage during the fall semester are not assessed the student insurance fee for spring and do not need to apply for cancellation for the spring semester.

Students (and their dependents) who are insured for the spring semester are automatically covered through the summer whether or not they enroll in the summer session. New students entering the university for summer session who are registered for 6 or more on-campus semester hours may elect to purchase student health insurance for themselves and their dependents by making application at the Student Insurance Office during the first four days of the summer session.

Students who withdraw from the university due to medical reasons must immediately contact the University Health Service and the Office of Student Services as well as their college advisement office if they have paid for and wish to retain their student medical insurance coverage.

Information concerning the hospital-medical insurance may be obtained from the Student Insurance Office located in the University Health Center building (753-0122).

Campus Information Center

The Campus Information Center, located in the Holmes Student Center, provides information about campus and community events and referral services for students, parents, faculty, staff, and visitors by telephone and in person.

Additional services include course registration information, information about class closings during severe weather, a system for relaying family or medical emergency information to individual students in class, and a system for reporting student absences of at least five consecutive class days to instructors. The center also offers COMPOOL, a matching service for commuting students interested in forming carpools to campus, a rider's/driver's board for one-time ride sharing, and campus tours.

A person needing more information or wishing to make use of the above services should contact the Campus Information Center, (815) 753-1157.

Center for Access-Ability Resources

In concordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, the university provides support services for students with a variety of disabilities. A wide range of services can be obtained including, but not limited to, housing, transportation, adaptation of printed materials, sign language interpreters, and advocacy with faculty and staff. Students wishing to request services or who want more information should contact the Center for Access-Ability Resources, University Health Service, (815) 753-1303 (voice or TDD). Verification of disability and the request for service need to be received in a timely manner so that services may be arranged and provided.
Counseling and Student Development Center

The Counseling and Student Development Center (CSDC, Campus Life Building, 200, 753-1206) supports the mission of the university to develop the whole person—intellectually, personally, socially, and culturally. The staff’s goal is to assist students in coping with issues of a personal nature, adjusting to the demands in a higher education environment, selecting and achieving educational goals, and reducing sources of interference to learning. Toward these ends, the CSDC provides services in the following major need areas.

- Individual, couple, and group counseling and therapy
- Psychiatric evaluation, crisis intervention, and psychological referrals
- Career counseling (career resources, printed materials, testing, computer-assisted exploration, individual counseling, and workshops)
- Drug and alcohol assessment
- Educational skills (Learning Assistance and Study Skills Laboratory, counseling, and workshops)
- Developmental workshops (in residence halls, classes, and other settings)
- Consultation (concerning mental health issues, programming, and organizations)
- Training
- Research and evaluation
- Support services for students of color

The center offers opportunities to a limited number of graduate students in psychology and counseling. They may serve as counselors, group facilitators, and program assistants through supervised internships, assistantships, and practica.

Other Campus Human Service Agencies

The Counseling Laboratory (416 Graham Hall, 753-9312) offers counseling services to persons who want assistance improving their personality development, modifying self-defeating behavioral characteristics, or resolving personal, career, or educational dilemmas. Counselors are advanced graduate students in counseling. Services are free, except that a nominal fee may be charged for some psychological or career interest testing.

The Family Center (429 Garden Road, 753-1684) provides premarital, marital, individual couple, and family therapy for people in the greater northern Illinois area. Therapists are advanced graduate students under the supervision of approved supervisors of the American Association for Marriage and Family Therapy in the School of Family, Consumer, and Nutrition Sciences.

The Speech and Hearing Clinic (Lucinda Avenue, 753-1481) offers a comprehensive program of evaluation, rehabilitation, and counseling services for any student with a hearing loss and/or speech-language disorder. Hearing aids, accessories, and repairs are available. The clinic is a unit of the Department of Communicative Disorders.

Career Planning and Placement Center

The university helps its students and alumni identify and secure employment through the Career Planning and Placement Center, a centralized office serving all departments. The following services are available.

- Individual counseling about job-related concerns
- Assistance in locating part-time/temporary off-campus employment
- Workshops and seminars focusing on job search strategies, resume writing, interviewing, and related topics
- On-campus opportunities to interview with employers
- Permanent credential files for students in education, nursing, and social service

Job fairs
- Current job vacancy listings and bulletins
- Alumni resume referral service
- A library of job search, employer information, and a variety of specialized directories

During the fall and spring semesters, the center is open 8 a.m. - 4:30 p.m. Monday, Thursday, and Friday and from 8 a.m. - 6 p.m. Tuesday and Wednesday. Summer hours are 8:00 a.m. - 4:30 p.m. Monday through Friday. Staff members are available for students and alumni on an individual basis during these hours. Special arrangements can be made for workshops and seminars for student groups and classes during regular office hours or at other times.

Office of Campus Recreation

Located in the Student Recreation Center, the Office of Campus Recreation provides a broad-based recreation program for the entire university community. A recent addition includes two full-size hardwood multipurpose courts for basketball and volleyball, a 6000 square foot cardio-weight room with the latest fitness equipment, and a fitness assessment room. Activities include intramural sports (organized tournament play), creative arts, fitness/weight training opportunities, aerobics, yoga, club sports, and outdoor adventures such as canoeing, backpacking, kayaking, caving, and rock climbing. In addition to organized activities, the student recreation center and swimming pools are open for self-directed pursuits including basketball, volleyball, badminton, table tennis, tennis, pickleball, and a three-lane jogging track. Ten racquetball/handball/wallyball courts, five with viewing walls, are also available. In addition, there are a weight training room fully equipped with free weights, and a fitness room with hydrafitness machines, exercise bikes, rows, ski trainers, and stairmasters. Locker and shower facilities with sauna are provided. For more information call 753-0231. Equipment for outdoor pursuits is available for checkout through the Outing Centre located on the west end of the student recreation center. For more information call 753-9423.

Cars on Campus

Any student may drive a car on campus, but parking facilities are limited and controlled. Parking lots are color-coded; all vehicles, including motorcycles and mopeds, must display an appropriate permit. Some parking is allowed on certain posted university streets. Additional parking privileges are extended to physically handicapped students. For further information, contact Campus Parking Services, located on the corner of Normal Road and Lincoln Terrace.

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

Campus Transportation

NIU maintains the largest university bus system in Illinois. The 13-bus system, governed by the Student Association Mass Transit Board, provides free transportation for all fee-paying students to campus and the DeKalb-Sycamore communities. The Huskie buses are in operation seven days a week while school is in session during the fall and spring semesters, and for limited hours during summer school. All Huskie buses are equipped with chair lifts to provide all students easy access to and from campus, shopping, and entertainment areas. For more information, call the Student Association at (815) 753-9922.

In conjunction with the University Police, the Mass Transit Board runs Late Nite Ride Service, which provides free safe passage home for students. The service operates Friday and Saturday nights from 2 a.m. to 6 a.m. and can be reached at 753-2222.
Through the Huskie Bus System and the Center for Access-Ability Resources, the NIU Student Association operates the FREEDOMMOBILE which provides transportation around the campus and vicinity for students with disabilities. During winter months class-to-class transportation is available for students with a qualifying disability. For more information, call the Center for Access-Ability Resources at (815) 753-1303.

Child Care

The Shirley W. Nelson Campus Child Care Center at NIU is a nationally accredited and licensed facility which provides quality care for children ages 2 through 6 years. Enrollment is limited to NIU students, faculty, and staff with priority given to student families. The center is staffed with head teachers who have at least a baccalaureate degree in early childhood studies. The teaching staff is supplemented with NIU student workers, and together they provide a developmentally appropriate curriculum for the children. The center is open Monday through Friday, 7:30 a.m. to 5:30 p.m.

Students' Legal Assistance Office

Two Illinois attorneys and their staff provide legal information and assistance to eligible fee-paying NIU students. The office handles a large variety of cases including landlord-tenant, criminal misdemeanor, traffic, consumer, discrimination, tort, public benefits, employment, and domestic relations. It is preferred that appointments be made. The offices are located in the Holmes Student Center and can be reached by calling 753-1701.

The operation 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 Northern Illinois University and matters between Northern Illinois University students. Persons able to procure private counsel are not eligible for litigational representation.

In addition to direct legal services, the lawyers have instituted a mediation service to handle problems between students and have developed an extensive “preventative-law” program designed to prevent problems through community education. Handout materials include a Tenant/Landlord Handbook, Roommate Survival Guide, Sexual Assault Handbook, Used Car Buyer's Guide, a Traffic Ticket Handbook, and legal forms including subleases, room condition reports, and roommate agreements.

Office of the Ombudsman

The Office of the Ombudsman provides members of the university community neutral and confidential assistance and advice regarding concerns related to the university. Staff members of the office provide information designed to address any concerns or grievances.

The services of the ombudsman are available to every member of the university community—students, staff, and faculty. Any type of concern may be brought to the attention of this office: academic, financial, housing, consumer, work-related, or personal. As a designated neutral party, the ombudsman is precluded from advocating on behalf of any individual but will listen to the concern, help explore options, offer suggestions and advice, and assist in the resolution of the concern from an objective point of view.

Mediation services, direction and referral to appropriate individuals and offices, and clarification of university policies and procedures are distinctive services of the office. All communications with the Office of the Ombudsman are held in strict confidence.

The Office of the Ombudsman is located in the Holmes Student Center, Room 601. Appointments may be made by calling 753-1414.

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 "International Programs."

Center for Black Studies

The Center for Black Studies is an academic and research center that collects and analyzes data on all aspects of minority experiences, particularly those of blacks. The center also coordinates an interdisciplinary undergraduate minor in black studies. In addition, the center seeks to stimulate students’ professional and career interests through the sponsorship of various distinguished speakers and cultural events.

Center for Latino and Latin American Studies

The Center for Latino and Latin American Studies facilitates the study of Latinos in the United States and their countries of origin. The center administers the undergraduate minor in Latino and Latin American Studies, sponsors colloquia, funds research grants for faculty and students, and offers additional support services to graduate students and faculty with research interests in these fields.

Office of University Resources for Latinos

The Office of University Resources for Latinos offers a variety of programs and activities designed to assist, encourage, stimulate, and motivate Latino students. Some of the services available include the provision of cross-cultural counseling, career information, referral to the appropriate university office so students may obtain the administrative and academic assistance they require, a peer mentor program, and other general support services.

Office of University Resources for Women

The Office of University Resources for Women (URW) offers information, programs, and services to NIU's community of women, including students, faculty, and staff. URW is especially interested in women returning to school—or thinking of returning to school—after an interruption in their education. The staff provides workshops, seminars, networking, and support groups on career development, life transition, personal effectiveness, academic skills, and leadership development. Short-term counseling is available regarding academic progress, careers, personal development, and other concerns. Where more extensive counseling or assistance is required, referrals are made to appropriate experts on and off campus. Located at 105 Normal Road, the office is accessible to disabled persons. Telephone: (815) 753-0320.

Office of Testing Services

The Office of Testing Services, located in Altgeld Hall 125, provides a variety of services to students and faculty. This office administers many of the tests associated with course placement, departmental qualification requirements, university graduation 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.
External Programming

Graduate credit courses are offered off campus by the Colleges of Business, Education, Engineering and Engineering Technology, Health and Human Sciences, Liberal Arts and Sciences, and Visual and Performing Arts. For a list of off-campus graduate course locations, students should consult the spring, summer, and fall Schedule of Classes. In addition, the Illinois Board of Higher Education has authorized several NIU graduate degree programs to be offered in a number of specific areas, primarily in the Hoffman Estates, DuPage, and Rockford areas.

College of Business: M.B.A. and M.S.T.
College of Education: M.S.Ed. in adult continuing education, counseling, curriculum and instruction, early childhood education, educational administration, elementary education, reading, school business management, and special education.
College of Engineering and Engineering Technology: M.S. with majors in electrical engineering and mechanical engineering.
College of Liberal Arts and Sciences: M.P.A. and M.S. in computer science.

Students admitted to the NIU Graduate School or accepted as students-at-large may enroll in off-campus (as well as on-campus) classes for graduate credit. Adult students who are exploring various disciplines before formal commitment to a degree program may enroll under the student-at-large status in off-campus classes. Others may wish to pursue noncredit courses for personal or professional development. Students should consult with graduate advisers in their chosen field, and should become familiar with the regulations in this catalog, to determine the amount of credit earned as a student-at-large that may be applied to their graduate degree programs.

The university also provides professional development experiences in a variety of appropriate formats, such as one-day workshops, seminars, conferences, training programs, short courses, distance-learning courses, guided individual study courses, and consultations. Enlisting the instructional and research expertise of the diverse university faculty, the university matches these resources with the articulated needs of practicing professionals. 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 employers.

Cooperative Education/Internship Program

The Cooperative Education/Internship Program provides opportunities for students to apply their academic training in job positions relevant to their career fields. Internships and cooperative education positions are typically paid and are located with approved employers. Academic credit may be arranged through the appropriate academic department. The program assists graduate students in fulfilling the practicum/internship requirements of their academic programs. To participate in the Cooperative Education/Internship Program students must be enrolled in a degree-granting program, have career goals related to the type of work experience available through the program, and obtain the approval of the appropriate program coordinator. Information about the Cooperative Education/Internship Program may be obtained from the Cooperative Education/Internship Program office, Campus Life Building, Room 240, (815) 753-7138 or via e-mail at coop-ed@niu.edu or check the home page at http://www.niu.edu/depts/coop_ed.

Development and University Relations

The Division of Development and University Relations is responsible for increasing awareness, interest, and support of NIU. Offices within the division are responsible for managing philanthropy to benefit the university, building strong relationships with NIU alumni and friends, and communicating with internal and external audiences.

The Office of the Vice President for Development and University Relations provides administrative direction to the Offices of Alumni Relations, Development, Publications, Public Affairs, and Northern Public Radio, the university’s public radio service. The office also coordinates the efforts of the Alumni Association and the NIU Foundation boards.

Each year, alumni and friends of NIU make gifts totalling nearly $5 million that benefit scholarships, academic programs, facilities, and athletics, as well as other endeavors. This support is in the form of direct gifts, wills and bequests, insurance plans, trust funds, or property. Gifts to the university from private sources are channeled through the Office of Development and the Northern Illinois University Foundation.

Alumni Association

The Northern Illinois University Alumni Association fosters a continuing relationship between alumni and the university. The association is dedicated to serving NIU and its alumni by providing programs that enhance communication and support by alumni for the university.

Alumni receive Northern Now, a periodical containing news and features about the university. The association offers programs throughout the year, on campus and off, designed to appeal to the diverse interests of alumni. The Alumni Association also provides merit scholarships to outstanding students, supports NIU libraries, and assists financially with special university and academic departmental activities. All graduates are members of the Alumni Association, and active membership is conferred upon those alumni who assist the university and the Alumni Association with a financial contribution of any amount.

The Board of Directors of the Alumni Association is a policy-making body of elected alumni who serve on the board of directors and with alumni volunteers who serve the university in many roles. The Alumni Association works closely with the NIU Foundation, which is established to receive major gifts for Northern Illinois University's development as an institution of higher education.

Northern Illinois University Foundation

The Northern Illinois University Foundation is a nonprofit, tax-exempt corporation that secures and manages gifts of money, property, works of art, or other material having educational and historical value. It receives and administers such gifts to support university programs with supplemental resources where state funding is non-existent or inadequate.

The foundation is governed by a board of directors consisting of elected representatives of alumni and friends. The foundation provides educational fund-raising for the university. This board is empowered to transfer to the university any property assigned or conveyed to it.

One of the foundation’s major projects is the support of the Outstanding Scholar awards, which provide merit scholarships to highly qualified high school graduates. The foundation also provides departmental and general university support.

For further information, contact the Office of Development.
College of Business

Dean: David K. Graf, Ph.D.
Associate Dean: Lynn Neeley, Ph.D.

Department of Accountancy
Department of Finance
Department of Management
Department of Operations Management and Information Systems

Admission to Graduate Programs in Business

Admission to the various graduate programs in business is competitive and limited to those candidates who can demonstrate high promise of success in a graduate business degree program. In addition to compliance with the policies of the Graduate School, the College of Business considers several indicators of potential for success in graduate business studies including, but not limited to, the following.

- A minimum cumulative GPA of 2.75 (based on a 4.00 system) at the baccalaureate institution, or a minimum cumulative GPA of 2.75 in the last 60 hours of the baccalaureate program, or the completion of 15 or more semester hours of graduate work at an accredited institution with a minimum GPA of 3.20.
- The total score and verbal and quantitative percentiles, and where available the analytical writing assessment (AWA) score, on the GMAT standards set by the individual graduate programs in business.
- Work experience at the post-baccalaureate level, where applicable.
- Leadership and communication skills as documented in a goals statement and resume.
- A minimum of two letters of recommendation.
- Submission of results on the Test of English as a Foreign Language (TOEFL) for all applicants whose native language is not English.

At the discretion of the respective program directors, candidates may be required to come in for an interview or to submit additional materials deemed important in assessing potential for success in graduate business studies.

Graduate Study in Business

The College of Business offers the Master of Business Administration (M.B.A.) with an area of study; the Master of Accounting Science (M.A.S.), with an area of study; Master of Science (M.S.) programs in finance and management information systems; and the Master of Science in Taxation (M.S.T.). These programs are accredited by AACSB - The International Association for Management Education.

All master's degree programs consist of two phases. Phase One consists of 18 semester hours.

**Phase One**

- ACCY 505, Financial Accounting Concepts (2)
- FINA 500, Survey of Business Economics (2)
- FINA 505, Fundamentals of Financial Management (2)
- MGMT 505, Principles of Management (2)
- MGMT 511, Legal Aspects of Business (2)
- MKTG 505, Graduate Survey of Marketing (2)
- OMIS 505, Principles of Operations Management (2)
- OMIS 507, Business Information Systems (2)
- OMIS 524, Business Statistics (2)

The Phase One prerequisite of finite mathematics or a first course in calculus should be completed prior to entering a graduate program in business.

**Phase Two**

See the master's degree program requirements in the appropriate department section for specific Phase Two requirements. Students must file and follow an approved program of courses.

Limitation of Time

All Phase Two requirements must be met within six consecutive years. This time limitation commences with entry into the first Phase Two course, including work for which transfer credit is allowed. If a course taken to complete the requirements for Phase Two does not fall within the six-year period allowed for the degree, the student must demonstrate currency by examination or by repeating the course.

Students-at-Large

Students-at-large are normally prohibited from registering for graduate business courses.

Master of Business Administration

The primary mission of NIU's M.B.A. program is to serve business and other organizations by preparing students to be leaders. The themes of a global view of business, leadership, ethics, and communication are important and integral parts of the program. Students are encouraged to integrate these themes into term papers, case presentations, and classroom discussions.
Phase One

See Phase One requirements listed under "Graduate Study in Business."

Phase Two

Phase Two requires a total of 31 semester hours. Students are required to take a minimum of 24 semester hours of Phase Two course work in classes reserved exclusively for admitted graduate students. Upon approval of the office of graduate studies in business, a maximum of 6 semester hours of 400-level courses offered for graduate credit may be included in a student's Phase Two program of courses.

Attendance in three College of Business colloquia as designated by the office of graduate studies in business is required prior to graduation.

Course Requirements

ACCY 630, Managerial Accounting Concepts (3)
FINA 607, Financial Analysis (3)
MGMT 625, Managing Behavior in Organizations (2)
MGMT 630, Professional Business Communication (2)
MGMT 672, Strategic Management and Policy (3)
MKTG 654, Marketing Management (3)
OMIS 627, Operations Analysis (3)
OMIS 640, Management of Information Systems Technology (3)
One of the following areas of study after consultation with an adviser in the office of graduate studies in business (9)

Finance

FINA 585, International Business Finance (3)
FINA 662, Financial Management Strategies (3)
Additional finance graduate elective course work (3), OR ACCY 640, Financial Statements Analysis (3)

International Business

FINA 585, International Business Finance (3)
MGMT 667, International Management (3)
MKTG 656, Seminar in International Marketing (3)

Management Information Systems

Three of the following (9)
OMIS 621, Computer Simulation in Business (3)
OMIS 624, Expert Systems in Business (3)
OMIS 649, Business Computer Operating Systems (3)
OMIS 651, Business Systems Analysis and Design (3)
OMIS 652, Business Applications of Data Base Management Systems (3)
OMIS 660, Business Telecommunications (3)
OMIS 661, Business Decision Support Systems (3)

Marketing

Three of the following (9)
MKTG 550, Personal Selling for Managers (3)
MKTG 603, Marketing Research and Analysis (3)
MKTG 604, Independent Study in Marketing (3)
MKTG 625, Buyer Behavior (3)
MKTG 646, Sales Administration (3)
MKTG 655, Promotional Strategy (3)
MKTG 656, Seminar in International Marketing (3)
MKTG 660, Marketing Seminar (3)

Strategic Management

MGMT 650, Strategic Environmental Analysis (3)
MGMT 661, Strategic Management Processes (3)
MGMT 687, International Management (3), OR MGMT 648, Strategic Human Resource Management (3)

General Area of Study

A minimum of 9 semester hours of elective course work in any College of Business department or, with the prior approval of the office of graduate studies in business, from any other department of the university

Course Sequencing

All Phase One course work must be completed prior to enrollment in FINA 607, MGMT 625, MGMT 630, MGMT 672, MKTG 654, and OMIS 627.

Phase One courses may be taken concurrently with ACCY 630, OMIS 640, area of study course work, and the colloquia provided course-specific prerequisites have been met.

MGMT 625 and MGMT 630 must be taken together in the same term and must be completed prior to enrollment in FINA 607, MGMT 672, MKTG 654, or OMIS 627.

FINA 607, MKTG 654, and OMIS 627 must be completed prior to enrollment in MGMT 672.

ACCY 630 and OMIS 640, area of study course work, and colloquia may be taken concurrently with MGMT 672.

Executive Master of Business Administration

The executive M.B.A. program is designed to meet the needs of working executives who desire to earn the degree while continuing to work full time in an organization. Students must have had five or more years of previous managerial experience and be sponsored by their employer. While participating in the executive M.B.A., students continue working full time. Courses are offered on Saturdays for four semesters. Students may begin the executive M.B.A. only in the fall semester. For further information contact the executive M.B.A. office, (815) 753-0257.

International Business

The College of Business, through its courses dealing with international marketing, international finance, international management, travel seminars, and similar topics, is prepared to meet the needs of students who have interest and aptitude in the broad area of international business.

Interdisciplinary Courses Offered by the College of Business

UBUS 490. TOPICS IN BUSINESS (1-3). Selected topics from the various business disciplines. Course content includes an integration of the functional areas of business administration and topics of current importance. May be repeated to a maximum of 6 semester hours. PRQ: Consent of instructor.

UBUS 595. INTERNSHIP IN BUSINESS (3-6). Designed primarily for students lacking full-time business experience. Full-time work for a summer or a semester as an intern in a business firm under the supervision of a coordinator from the College of Business. No more than 3 semester hours may be applied to Phase Two program requirements. The only grades awarded are S, U, and I. PRQ: Consent of department.

1A maximum of 6 semester hours in study-abroad credit may be used towards satisfying the requirements of this area of study. Study-abroad programs must have prior approval by the office of graduate studies in business.
Department of Accountancy (ACCY)

Chair: Patrick R. Delaney

Graduate Faculty

Richard E. Baker, professor, Distinguished Teaching Professor, Ernst and Young Professor of Accountancy, C.P.A., Ph.D., University of Wisconsin
Robert E. Bennett, associate professor, C.M.A., C.P.A., Ph.D., University of Missouri
Rodger A. Bolling, professor, LL.M., University of Florida
Gregory A. Carnes, associate professor, C.P.A., Ph.D., Georgia State University
C. William Cummings, associate professor, C.D.P., C.P.A., Ph.D., University of Missouri
Patricia C. Delaney, professor, Arthur Andersen & Co. Alumni Professor of Accountancy, C.P.A., Ph.D., University of Illinois
James A. Hendricks, professor, Square D Professor of Accountancy, C.P.A., Ph.D., University of Illinois
Linda M. Johnson, associate professor, C.P.A., Ph.D., Arizona State University
Van E. Johnson, associate professor, C.P.A., Ph.D., Arizona State University
David E. Keys, professor, Household International Professor of Accountancy, C.M.A., C.P.A., Ph.D., University of Illinois
Curtis L. Norton, professor, Deloitte and Touche Professor of Accountancy, C.P.A., Arizona State University
John R. Simon, professor, Presidential Teaching Professor, Coopers and Lybrand Professor of Accountancy, C.P.A., Ph.D., University of Illinois
Pamela A. Smith, assistant professor, C.P.A., Ph.D., University of North Texas

Master of Accounting Science

The objective of the M.A.S. program is to provide its graduates with technical expertise and competence for advancement in industrial, public accounting, accounting systems consultant, government, and nonprofit organizations. The courses emphasize analysis of alternative theory structures and integrate practical problems, case studies, and studies of socioeconomic phenomena involving uncertainty.

The educational experience enables students to develop further their intellectual, interpersonal, and communication skills and professional orientation. Additionally, the educational experience enables graduates to develop the motivation and ability to learn throughout their careers.

In addition to the College of Business standards listed above under "Graduate Study in Business," the admission standard for the Department of Accountancy is a minimum 3.00 GPA in undergraduate accountancy courses. Candidates may also be asked by the department graduate adviser to complete an interview either in person or by phone.

Phase One

See requirements listed under "Graduate Study in Business."

The graduate Phase One requirements must be included in the student's program unless a grade of C or better has been earned in the corresponding undergraduate courses. A student with a baccalaureate degree in business and acceptable undergraduate grades may have already satisfied Phase One requirements.

In addition to Phase One, the student must show proficiency in accounting information systems, intermediate cost management, intermediate financial reporting I and II, auditing investigation and attestation, and individual taxation.

This requirement must be satisfied through credit with a grade of C or better in appropriate courses, or through acceptable performance on a proficiency examination. The GPA earned for all courses in this group must be 3.00 or above.

None of the above courses may be counted as accountancy electives in Phase Two.

The writing of a thesis is optional. It is recommended that calculus be taken in addition to finite math (equivalent to MATH 210).

Phase Two

The M.A.S. student is required to select an area of study—general accounting, public accounting, accounting information systems, information systems auditing, cost management, governmental and not-for-profit accounting, or taxation.

The student is required to complete a minimum of 30 semester hours of work beyond Phase One and the baccalaureate degree. Of these 30 semester hours, 21 must be in classes reserved exclusively for admitted graduate students and 15 of the 21 hours must be in accounting. With the approval of the adviser or the chair of the Department of Accountancy, other courses may be substituted for a maximum of 9 semester hours of Phase Two course work.

Course Requirements (9)

ACCY 644, Advanced Taxation (3), OR ACCY 647, Corporate Taxation (3)
ACCY 664, Financial Statement Auditing (3)
ACCY 670, Accounting Research (3), OR ACCY 645, Professional Tax Research (3)
One of the following areas of study (21)

General Accounting

Accountancy courses in consultation with and approval of adviser (6)

Non-accountancy courses in consultation with and approval of adviser (9)

Electives with approval of adviser (6)

1ACCY 310, or its equivalent, will be accepted as meeting the Phase One requirement of OMIS 507 for entering M.A.S. students.
2A substitute course approved by department adviser.
3Students in the accounting systems/information systems auditing area of study must select one elective in accountancy at the 500 or 600 level.
4Or MGMT 412, MGMT 635, and/or OMIS 600, if not used to fulfill requirement below.
5One of these courses (3 semester hours) must be outside accountancy.
Public Accounting
ACCY 433, Financial Reporting III (3)
ACCY 634, Financial Accounting Theory (3)
FINA 455, Futures and Options Markets (3)
MGMT 412, Business Law (3)
MGMT 537, Entrepreneurship and Venture Management (3)
Electives with approval of adviser (6)

Accounting Information Systems/Information Systems Auditing
ACCY 421, Advanced Cost Management (3)
ACCY 611, Advanced Accounting Information Systems (3)
ACCY 667, Information Systems Auditing (3)
Three of the following (9)
OMIS 649, Operating Systems (3)
OMIS 651, Systems Analysis and Design (3)
OMIS 652, Database Systems (3)
OMIS 680, Data Communications (3)
Electives with approval of adviser (3)

Cost Management
ACCY 421, Advanced Cost Management (3)
ACCY 622, Cost Management Theory (3)
Two of the following (5-6)
ACCY 433, Financial Reporting III (3)
ACCY 480, Governmental and Not-for-Profit Accounting (2)
ACCY 611, Advanced Accounting Information Systems (3)
ACCY 673, Internship in Accountancy (3)
MGMT 412, Business Law (3),
or a substitute course approved by adviser
MGMT 635, Organization Behavior (3),
or a substitute course approved by adviser
OMIS 600, Managerial Economics (3),
or a substitute course approved by adviser

Governmental and Not-for-Profit Accounting
ACCY 480, Governmental and Not-for-Profit Accounting (3)
ACCY 680, Advanced Governmental and Not-for-Profit Accounting (3)
PSPA 510, Public Budgeting and Financial Management (3)
An elective chosen from PSPA courses approved by adviser (3)
Electives with approval of adviser (3)

Related study in law, political science, and public finance is highly recommended.

Taxation
ACCY 649, Partnership Taxation (3)
ACCY 651, Federal Estate and Gift Taxation (3)
ACCY 656, Taxation of Business and Investment Decisions (3)
Three of the following (9)
FINA 520, Investment Fundamentals (3)
MGMT 412, Business Law (3)
Other non-accountancy courses with approval of adviser
Electives with approval of adviser (3)

Master of Science in Taxation
The objective of the M.S.T. program is to provide its graduates with technical expertise and competence in the area of taxation for advancement in the accounting field. The program is designed to meet the needs of working professionals who desire to earn the degree while continuing to work full time in an organization.

The educational experience enables students to develop further their intellectual, interpersonal, and communication skills and professional orientation. Additionally, the educational experience enables graduates to develop the motivation and ability to learn throughout their careers.

Admission
An applicant is required to have a baccalaureate degree or a master's degree from a regionally accredited institution with at least 15 semester hours in accounting (including a course equivalent to ACCY 450/ACCY 455) or department approval (prior work experience will be given consideration); or a law degree (J.D.) from an institution accredited by the American Bar Association.

Applicants who do not have an advanced degree must have a minimum GPA of 2.75 in the last 60 hours of the baccalaureate program or a minimum cumulative GPA of 2.75 (on a 4.00 scale) at the baccalaureate institution. Satisfactory scores (verbal, quantitative, and total) on the GMAT are required of applicants without an advanced degree or significant work experience.

Requirements
ACCY 645, Professional Tax Research (3)
ACCY 646, Tax Administration and Procedure (3)
ACCY 647, Corporate Taxation (3)
ACCY 648, Advanced Corporate Taxation (3)
ACCY 649, Partnership Taxation (3)
ACCY 651, Federal Estate and Gift Taxation (3)
ACCY 652, Taxation of Estates and Trusts (3)
ACCY 656, Taxation of Business and Investment Decisions (3)
Six semester hours from the following (6)
ACCY 654, Tax Seminar (3-6)
ACCY 655, International Taxation (3)
ACCY 657, Deferred Compensation (3)

Course List
421. ADVANCED COST MANAGEMENT (3). Advanced study of the information required in management planning and control systems. The theory and application of product costing, operational control, cost allocation, and performance evaluation for manufacturing and service organizations. Topics include transfer pricing, competitive costing, division performance measurement, regression analysis, statistical quality control, activity-based costing, automation and cost management, target costing, and Japanese cost management. PRQ: ACCY 320 or consent of department. CRO: UBUS 311 or consent of department.

433. FINANCIAL REPORTING III (3). The study of financial accounting theory and practice relating to accounting for business combinations under the purchase and pooling methods, consolidated financial statements, international operations, segment and interim reporting standards, debt restructure, corporate insolvency, partnership accounting, and accounting for specialized industries such as banking, construction, franchising, and real estate. Coverage of SEC reporting standards. Use of data bases in researching accounting issues and in analyzing and preparing disclosures. Extensive use of group projects. PRQ: ACCY 432 with a grade of C or better, or consent of department.

456. ADVANCED FEDERAL TAXES (3). A study of federal taxes imposed on business entities with emphasis on corporations, partnerships, and S corporations. Also includes an overview of tax research techniques. Students may not receive credit for both ACCY 456 and ACCY 654. PRQ: ACCY 455 or consent of department.

463. ADVANCED AUDITING (3). An in-depth analysis of advanced topics in auditing with special attention to professional standards, the impact of SEC on auditing, the objectives in planning an audit, and current topics in auditing. Students may not receive credit for both ACCY 463 and ACCY 664. PRQ: ACCY 460 with at least a C or consent of department.

462. INTERNAL AUDITING (3). An understanding of the internal audit function. Topics include internal audit standards, internal controls, risk assessment, evidence and documentation, and communications. Auditing techniques including sampling and use of systems-based audit techniques. Review of ethics, emerging issues, and industry specific matters. PRQ: ACCY 360 and ACCY 473, or consent of department.

1ACCY 310, or its equivalent, will be accepted as meeting the Phase One requirement of OMIS 607 for entering M.A.S. students.
2Or a substitute course approved by department adviser.
3Students in the accounting systems/information systems auditing area of study must select one elective in accountancy at the 500 or 600 level.
4Or MGMT 412, MGMT 635, and/or OMIS 600, if not used to fulfill requirement below.
5One of these courses (3 semester hours) must be outside accountancy.
475. C.P.A. PROBLEMS (3). The analysis and review of accounting principles and practices as developed and illustrated in complex selected problems. Discussion of selected problems and theory. Laboratory practice in the solution of typical problems encountered in the C.P.A. examination. Prq: Consent of department.

480. GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING (3). Basic introduction to state and local government accounting, federal government accounting, not-for-profit organization accounting; GAO audit standards and the single audit act, and not-for-profit tax issues. Prq: ACCY 331 or consent of department.

505. FINANCIAL ACCOUNTING CONCEPTS (2). An introduction to the nature, uses, and limitations of financial accounting information. Financial accounting concepts, especially those related to the preparation of financial statements and related disclosures. Students will develop the skills to analyze and interpret financial statements. Prq: Consent of department.

509. MASTER'S THESIS (1-6). Open to students writing a thesis under the direction of a member directing the thesis. May be repeated to a maximum of 6 semester hours. Not available for S/U grading. Prq: 21 semester hours of accounting and consent of department.

511. ADVANCED ACCOUNTING INFORMATION SYSTEMS (3). In-depth analysis of advanced accounting information systems and applications. Emphasis on current topics and developments in the area. Coverage of various industries' accounting information systems and their different information systems platforms. Students may not receive credit for both ACCY 411 and ACCY 611. Prq: ACCY 310 with at least a C or consent of department.

522. COST MANAGEMENT THEORY (3). A study of the theory underlying management planning and control systems. Readings and cases used to examine product costing, operational control, cost allocation, and performance evaluation in manufacturing and service organizations. Prq: 9 semester hours of accounting, including ACCY 320 or consent of department.

530. MANAGERIAL ACCOUNTING CONCEPTS (3). The uses of accounting information in interpreting, coordinating, and implementing management's policies, in measuring and evaluating performance, and in tactical and strategic planning for future business activity. Not open to students with 456. Prq: ACCY 320 or consent of department.


540. FINANCIAL STATEMENTS ANALYSIS (3). Analysis and interpretation of financial reports with particular reference to the construction of statements, the meaning of accounts, ratios, and other evaluating indices. Prq: ACCY 630 or consent of department.

544. ADVANCED TAXATION (3). A study of the federal income taxation of business entities. Emphasizes corporations, partnerships, and S corporations and includes an introduction to tax research. Students may not receive credit for both ACCY 456 and ACCY 644. Prq: ACCY 455 or consent of department.

545. PROFESSIONAL TAX RESEARCH (3). An examination of tax research methodologies with emphasis on the legal research methodology. Includes several independent research projects designed to emphasize the evaluation of various tax authorities. Prq: 21 semester hours of accounting including ACCY 455, or consent of department.

546. TAX ADMINISTRATION AND PRACTICE (3). A study of the structure, powers, and procedures of the Internal Revenue Service, including the IRS audit process. Examines rules governing tax practice and professional ethics. Prq: 21 semester hours of accounting including ACCY 455, or consent of department.

547. CORPORATE TAXATION (3). A study of federal income taxation of corporations and shareholders with emphasis on transactions between the corporation and its shareholders. Topics include corporate reorganizations, distributions to shareholders, stock redemptions, corporate liquidations, penalty taxes, and special rules for S corporations. Prq: 21 semester hours of accounting including ACCY 455, or consent of department.

548. ADVANCED CORPORATE TAXATION (3). A study of the federal income taxation of corporate reorganizations, including mergers, acquisitions, corporate divisions, and the carryover of tax attributes, and the tax rules concerning consolidated tax returns. Prq: 24 semester hours of accounting including ACCY 647, or consent of department.

549. PARTNERSHIP TAXATION (3). A study of the federal income taxation of partnerships, with emphasis on the tax laws related to the formation, operation, and liquidation of partnerships. Prq: 21 semester hours of accounting including ACCY 455, or consent of department.

611. FEDERAL ESTATE AND GIFT TAXATION (3). A study of the federal estate and gift tax laws with emphasis on tax-planning techniques designed to minimize transfer taxes and ensure the orderly transfer of assets to succeeding generations. Prq: 21 semester hours of accounting including ACCY 455, or consent of department.

651. FEDERAL ESTATE AND GIFT TAXATION (3). A study of the federal estate and gift tax laws with emphasis on tax-planning techniques designed to minimize transfer taxes and ensure the orderly transfer of assets to succeeding generations. Prq: 21 semester hours of accounting including ACCY 455, or consent of department.

655. INTERNATIONAL TAXATION (3). A study of the U.S. laws that have tax implications for international transactions. Primary emphasis on the U.S. taxation of multinational operations and the taxation of foreign persons in the U.S. Prq: 21 semester hours of accounting including ACCY 455, or consent of department.

656. TAXATION OF BUSINESS AND INVESTMENT DECISIONS (3). A study of selected topics including the tax rules that underlie accounting periods and methods, the taxation of property transactions, and the taxation of security transactions. Prq: 21 semester hours of accounting including ACCY 455, or consent of department.

657. DEFERRED COMPENSATION (3). A study of tax laws and reporting requirements related to qualified pension, profit-sharing, and stock bonus plans. Other topics include individual retirement accounts, retirement accounts for self-employed individuals, and the taxation of different forms of compensation. Prq: 21 semester hours of accounting including ACCY 455, or consent of department.

664. FINANCIAL STATEMENT AUDITING (3). An in-depth analysis of financial statement auditing topics with special attention to audit theory and professional standards. Topics include professional responsibilities of financial statement auditors, impact of the SEC on auditing, objectives in planning an audit, and preparation of the final audit report. Prq: ACCY 331, ACCY 360, and ACCY 432, or consent of department.

667. INFORMATION SYSTEMS AUDITING (3). Study of the practical aspects of information systems auditing (ISA). Includes assurance services, internal control assessments, and evidence-gathering activities in advanced accounting information systems. Prq: ACCY 360 or consent of department.

670. ACCOUNTING RESEARCH (3). An examination of the methods of inquiry and research and development of competence in professional writing. Includes outside readings in those areas and written critiques of selected accounting literature. A major paper also required. Prq: 18 semester hours of accounting or consent of department.
673. INTERNSHIP IN ACCOUNTANCY (3). Designed primarily for students lacking full-time business experience. Full-time work for a summer or a semester as an intern in a business firm under the supervision of a coordinator from the Department of Accountancy. No more than 3 semester hours may be applied to Phase Two Program requirements. S/U grading. PRQ: Consent of department.

679. SEMINAR IN ACCOUNTING (3). The study of theories, principles, practices, and procedures in all areas of accounting. Independent and group investigation of problems of special interest in the field of accounting. May be repeated to a maximum of 6 semester hours with departmental approval. PRQ: 21 semester hours of accounting or consent of department.

680. ADVANCED GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING (3). Designed for students interested in careers in federal, state, or local governmental units, or in not-for-profit organizations. Internal management of government and not-for-profit organizations, budgeting/financial management, systems applications, internal controls, GNP audit issues, not-for-profit tax issues, and financial statement analysis. PRQ: ACCY 480 or consent of department.
Department of Finance (FINA)

Chair: Robert E. Miller

Graduate Faculty

William Chittenden, assistant professor, Ph.D., Texas Tech University
Richard J. Downen, professor, C.M.A., Ph.D., State University of New York, Binghamton
John J. Dran, associate professor, D.B.A., Kent State University
Gerald R. Jensen, associate professor, Ph.D., University of Nebraska at Lincoln
James M. Johnson, professor, Ph.D., Ohio State University
Robert E. Miller, professor, Safety-Kleen Professor of Finance, Ph.D., University of Kansas
Jeffrey M. Mercer, associate professor, Ph.D., Texas Tech University
Donald E. Weiss, associate professor, Ph.D., University of Wisconsin

Master of Science in Finance

The purpose of the M.S. in finance program is to provide preparation for careers in corporate financial management, investments, banking and other financial institutions, real estate, and insurance. In addition, the M.S. in finance might be chosen by those students interested in a career in teaching or pursuing a doctoral degree in finance.

Phase One

See requirements listed under "Graduate Study in Business."

Phase Two

The student is required to complete a minimum of 30 semester hours of work beyond Phase One and the baccalaureate degree. Of these 30 semester hours, 21 must be in classes reserved exclusively for admitted graduate students.

Course Requirements

ACCY 640, 1 Financial Statements Analysis (3)
OMIS 671, 1 Business and Economic Forecasting (3)
FINA 603, Seminar in Financial Research (3)
FINA 607, 2 Financial Analysis (3)
FINA 662, Financial Management Strategies (3)
Finance elective (3)

At least one course in two of the following advanced finance topics

Financial Markets
FINA 651, Seminar in Financial Institution Management (3)
International Finance
FINA 585, International Business Finance (3)
Investments
FINA 622, Security Analysis (3),
OR FINA 623, Investment Management (3)
Electives as approved by adviser (6),
OR FINA 599, Master's Thesis (0-6)

1 Should be completed in the first 12 semester hours of Phase Two.
2 A student with a strong background in finance may, with approval of his or her adviser, select an alternative finance course.
3 The finance core consists of FINA 330T, FINA 340, and FINA 350.

Course List

430T. TREASURY AND CREDIT MANAGEMENT (3). Application of major issues in working capital and short-term financial management. Integration of financial concepts and financial models through electronic spreadsheets and other relevant technology to provide expertise in the area of short-term financial management while enhancing the student's analytical skills. Topics include cash budgeting, pro forma statements, and other techniques of analyzing current assets and liabilities. PRQ: Satisfactory completion of the finance core.

455. ANALYSIS OF DERIVATIVE INSTRUMENTS (3). The risk allocation function of options and futures markets from the perspective of market users. Hedging strategies and equilibrium pricing models. The roles of government regulation and international developments. PRQ: MATH 211 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 the Internet and the World Wide Web. Application of the latest statistical techniques in analyzing this data for decision making purposes. PRQ: Satisfactory completion of the finance core.

500. SURVEY OF BUSINESS ECONOMICS (2). Business economic concepts relevant to an analysis of the environment within which the business firm operates and those economic concepts basic to an analysis of a broad scope of business problems.

505. FUNDAMENTALS OF FINANCIAL MANAGEMENT (2). For graduate students with little formal background in finance. Financial theory and activities connected with the organization and operation of a business enterprise. The relationship of these financial activities to other aspects of business administration. Financial planning and control, working capital considerations, capital budgeting, sources and use of funds, valuation of enterprise, and the financial environment in which the firm operates. PRQ: ACCY 505 and OMIS 524, or consent of department.

520. INVESTMENT FUNDAMENTALS (3). Conceptual foundations and strategies for investment analysis and management. Focus on functions, structure, and efficiency of securities markets; an overview of risk and return; introduction to analysis and valuation of common stocks, fixed-income securities, and other alternative investments; and an introduction to the portfolio management process. Not open to students with credit in FINA 340. PRQ: FINA 505 and OMIS 524, or consent of department.

550. FUNDAMENTALS OF FINANCIAL MARKETS (3). The structure, operations, goals, and strategies of banking and nonbanking financial intermediaries. Attention given to the financial markets with emphasis directed to financial instruments including futures contracts. Not open to students with credit in FINA 350. PRQ: FINA 500 and FINA 505, or consent of department.

585. INTERNATIONAL BUSINESS FINANCE (3). The methods, practices, and institutions for financing international and foreign business firms including direct and indirect investments. Current developments relating to specific finance and monetary problems. PRQ: FINA 320 and FINA 350, or consent of department.

595. INTERNSHIP IN FINANCE (1-6). Designed primarily for students lacking full-time experience in finance. The student works for a summer or a semester as an intern in a business firm. No more than 3 semester hours may be applied to Phase Two program requirements. S/U grading. PRQ: Consent of department.

599. MASTER'S THESIS (1-6). Open to students writing a thesis under the M.S. or M.B.A. program. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.
600. MANAGERIAL ECONOMICS (3). Those phases of business economics that are particularly useful to the management of large industrial corporations. Profit objectives and the measurement and forecasting of demand and costs related to the decision-making processes in business. PRQ: FINA 500 or consent of department.

603. SEMINAR IN FINANCIAL RESEARCH (3). Review and evaluation of current research in finance giving consideration to the implication of findings for the improvement of business practices. Not for thesis credit. PRQ: OMIS 524 or consent of department.

604. INDEPENDENT STUDY IN BUSINESS (1-3). Open to students qualified to do individual study in business. Not for credit on the thesis. May be repeated to a maximum of 6 semester hours. Not available for S/U grading. PRQ: Consent of department.

607. FINANCIAL ANALYSIS (3). Analysis of current and future financial position that serves as the foundation for decision making by creditors, managers, and owners. Includes ratio analysis, sources and uses of funds, operating and financial leverage, capital budgeting under risk and uncertainty, the cost of capital, and the financial structure. A problem-oriented course, but cases and reading may be utilized. PRQ: FINA 320 or FINA 505 completed within the last six years, or consent of department.

613. READINGS IN FINANCE (1-3). Special readings useful to a student's individual program and objectives, but not available in regular course offerings. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

622. SECURITY ANALYSIS (3). A detailed study of the methods utilized in analyzing the major types of securities. Particular emphasis on equities. Due consideration given to economic, corporate, financial, and management factors. PRQ: FINA 520 and OMIS 524, or consent of department.

623. INVESTMENT MANAGEMENT (3). The investment management decision-making process from the viewpoint of individual and institutional investors. Major topics include forecasting trends in the stock and bond markets, formulating objectives for various types of investors, applying modern portfolio theory, analyzing active and passive investment strategies, selecting specific classes of investment, analyzing the effectiveness of investment management organizations including pension and mutual funds, and evaluating portfolio performance. Attention given to theories and their practical application to problem situations. PRQ: FINA 520 and OMIS 524, or consent of department.

650. SEMINAR IN MANAGERIAL ECONOMICS (3). Selected topics in managerial economics, emphasizing current literature on the theory and analysis of business. PRQ: FINA 600 or consent of department.

651. SEMINAR IN FINANCIAL INSTITUTION MANAGEMENT (3). Topics include contemporary developments in the management of financial institutions; management problems of different classes of institutions including banks, thrift institutions, insurance companies, investment banks and companies; and effects of increased concentration of government regulation. PRQ: FINA 350 or FINA 550, or consent of department.

662. FINANCIAL MANAGEMENT STRATEGIES (3). Current developments in financial management, including critical evaluation of selected topics dealing with theoretical and applied aspects of the decision-making process in business finance. PRQ: FINA 607 and OMIS 524, or consent of department.

695. SEMINAR IN FINANCE TOPICS (3). Critical analysis and discussion of financial topics, empirical research, and applications. Review of evolving topics in the scholarly literature, including contemporary issues and controversies. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.
Department of Management (MGMT, MGBE)

Chair: Daniel R. Wunsch

Graduate Faculty

Curtiss K. Behrens, associate professor, LL.M., DePaul University
Terrence R. Bishop, associate professor, Ph.D., University of Iowa
Paula E. Brown, assistant professor, Ed.D., Northern Illinois University
Ralph F. Catalanello, professor, Ph.D., University of Wisconsin
Luis G. Flores, associate professor, Ph.D., Texas Tech University
Charles R. Gowen, associate professor, Ph.D., Ohio State University
Marvin F. Hill, professor, J.D., Ph.D., University of Iowa
Albert S. King, professor, D.B.A., Texas Tech University
C. Lynn Neeley, associate professor, Ph.D., University of Tennessee
Christine L. Scheck, associate professor, Ph.D., Arizona State University
Betty L. Schroeder, associate professor, Ph.D., Michigan State University
David R. Wade, associate professor, J.D., University of Iowa
Daniel R. Wunsch, professor, Ph.D., University of California at Los Angeles
Joseph P. Yaney, professor, J.D., Ph.D., University of Michigan

Course List

Management (MGMT)

412. BUSINESS LAW (3). Commercial transactions, basic legal concepts of commercial paper, sales, secured transactions, and related topics. Uses case materials and problems. PRQ: MGMT 217 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: MGMT 217 or consent of department.

436. COMPENSATION AND BENEFITS ADMINISTRATION (3). Design and implementation of organizational compensation systems. Integration of internal equity and external market considerations in wage systems through use of job evaluations and market surveys. Compensation as a means of effective recruitment, motivation, and retention of employees. Benefits program design, cost containment, and program management. Performance appraisal processes and implementation of merit systems. Statutes affecting compensation practices (e.g., minimum wage laws, unemployment compensation, worker's compensation). PRQ: MGMT 433 or consent of department.

444. TRAINING AND DEVELOPMENT (3). Training needs analysis at organizational, task, and individual levels. Design, implementation, and evaluation of training and development systems. Evaluation of types of training media. Coordination and integration of employees' development with organizational human resource planning. Broad-scale organization development efforts. CRQ: MGMT 433 or consent of department.

498. EQUAL OPPORTUNITY AND EMPLOYMENT (3). An in-depth presentation of management, union, and individual perspectives of the causes and remedies of employment-based discrimination. Topics discussed include recruiting, promoting, seniority, discrimination, affirmative action, and testing. CRQ: MGMT 433 or consent of department.

505. PRINCIPLES OF MANAGEMENT (2). An introduction to the role of manager in interaction with superiors, subordinates, associates, and staff; theories of leading, organizing, planning, and controlling; and skills in communicating, coordinating, and directing. PRQ: Consent of department.

511. LEGAL ASPECTS OF BUSINESS (2). A general seminar in legal problems affecting business in the areas of contracts, personnel, taxation, property, and government regulation of business.

537. ENTREPRENEURSHIP AND VENTURE MANAGEMENT (3). Entrepreneurship creation and problems faced by entrepreneurs in the establishment of new ventures. A systemic problem-solving approach with an emphasis on "live" studies and plans for new business ventures. PRQ: Consent of department.

538. EMPLOYMENT LAW (3). Review, analysis, and evaluation of the National Labor Relations Act as amended. Primary emphasis includes an in-depth analysis of employment law; rights to organize and undertake concerted activity; legal framework of labor-management relations; selection and representation of unions; union member rights; etc. Current legislative and judicial developments as well as an extensive review and analysis of court and NLRB decisions. PRQ: MGMT 505 or consent of department.

595. INTERNSHIP IN MANAGEMENT (3-6). Designed primarily for students lacking full-time business experience. Full-time work for a summer or a semester as an intern in a business firm under the supervision of a coordinator from the Department of Management. No more than 3 semester hours may be applied to Phase Two program requirements. S/U grading. PRQ: Consent of department.

598. SEMINAR IN MANAGERIAL LEADERSHIP (3). Examination of new ideas and current trends in leadership and its role in a rapidly changing business environment. Discussion focused on leadership as it is recognized, developed, and applied in current business situations. PRQ: All Phase One courses or consent of department.

604. INDEPENDENT STUDY IN MANAGEMENT (1-3). Available to graduate students of demonstrated capability for specialized independent study in management. May be repeated to a maximum of 6 semester hours. Not available for S/U grading. PRQ: MGMT 505 and consent of department.

611. BUSINESS ETHICS AND STRATEGIC MANAGEMENT (3). Responses of organizations to environmental expectations and analysis of external and internal variables affecting the legal and ethical implications of strategic decisions. The role of general managers as mediators between organizational and societal interests and study of the firm as a corporate citizen. PRQ: MGMT 505 or consent of department.

619. NEGOTIATION AND CONFLICT MANAGEMENT (3). Examination of negotiation techniques and strategies relevant to managerial positions. Application of negotiation as a principled method of achieving fair and mutually satisfying agreements with specific applications to resolving personal and professional conflicts. PRQ: All Phase One courses or consent of department.

620. HUMAN RESOURCE MANAGEMENT AND LABOR RELATIONS (3). Management's problems, opportunities, and policy alternatives in personnel management and labor relations. Examination of recruiting, selection, compensation, training, and career development and day-to-day personnel issues. PRQ: MGMT 505 or consent of department.

625. MANAGING BEHAVIOR IN ORGANIZATIONS (2). Critical evaluation of theory, research, and practice related to individual and group behavior in organizational settings. Examination of motivation, teamwork, conflict, leadership, and other behavioral concepts that influence individual, group, and organizational effectiveness. PRQ: All Phase One courses or consent of department.
630. PROFESSIONAL BUSINESS COMMUNICATION (2). Development of skills necessary to be an effective communicator within the business environment. Emphasis on oral and written presentation skills using state-of-the-art technology and presentation software, interpersonal skills, and problem solving skills. PRQ: All Phase One courses or consent of department.

633. ORGANIZATION THEORY (3). Traces historical development of organization theory from preclassical through contemporary theories. Analysis of types of structure based on both classical and contemporary theories of management. Synthesis of their influence on individual, group, and organizational outcomes. PRQ: MGMT 505 or consent of department.

635. ORGANIZATIONAL BEHAVIOR (3). A critical evaluation of theory, research, and practice related to individual and group behavior in organizational settings. Examination of motivation, leadership, communication, decision-making, diversity, and other processes in terms of their influence on individual, group, and organizational outcomes. PRQ: MGMT 505 or consent of department.

638. SEMINAR IN HUMAN RESOURCES AND LABOR RELATIONS (3). Synthesis of diverse philosophies related to the growth of organized labor, with focus on the patterns of relationships between labor and management and the impact of these relationships on the socio-political environment of the community and the nation. Emphasis on research and the use of current literature. PRQ: MGMT 505 or consent of department.


650. STRATEGIC ENVIRONMENTAL ANALYSIS (3). Analysis of the internal and external environments which must be considered in strategic management. Examination of general, industry, and specific environments. Development of tools to analyze the resources and capabilities of an organization. Theories of organizational strategy and strategic patterns for success. Examination of the legal and ethical implications of strategic decisions. PRQ: MGMT 505 or consent of department.

661. STRATEGIC MANAGEMENT PROCESSES (3). Development and analysis of the strategic management function. Analytical, informational, and behavioral characteristics of the strategic processes. The design and organization of strategic planning systems. The design of strategic organizational structures and processes for proper strategy formulation and implementation. The coordination and integration of strategic management processes and systems. Study of the main concepts and methodologies that could help to manage strategic change in business organizations. PRQ: MGMT 505 or consent of department.

500. PRINCIPLES AND PROBLEMS OF BUSINESS EDUCATION (3). The characteristics of present-day business education in terms of its basic principles and typical practices, problems, and trends. Open only to students majoring in business education or by consent of department.

501. INTRODUCTION TO RESEARCH IN BUSINESS EDUCATION (3). Designed to acquaint students with significant research in business education and to develop competence in research methodology through an intensive study of the methods, techniques, and procedures used in research in business education. Open only to M.S.Ed. students majoring in business education or by consent of department.

510. CURRICULUM IN BUSINESS EDUCATION (3). Philosophies, problems, and methods in the development, implementation, articulation, and evaluation of curricula in business education. Open only to M.S.Ed. students majoring in business education or by consent of department.

520. STRATEGIES IN TEACHING INFORMATION PROCESSING (1-3). Strategies for improving the techniques of teaching courses in information processing through an examination of current research and the discussion of such problems as information processing in the curriculum; objectives of curriculum; testing and grading for typewriting/keyboarding/word processing; business communications; data processing; dictionary systems; computer-related business courses; and human dimensions of information processing in the workplace.

522. STRATEGIES IN TEACHING ACCOUNTING AND BASIC BUSINESS (1-3). Strategies and concepts of teaching accounting and basic business subjects, with emphasis on curriculum planning; teaching/learning strategies; instructional resources available; application of research findings, and current thought, trends, and issues.

525. METHODS OF TEACHING BUSINESS SUBJECTS (3). Objectives, content, materials, specific presentation methods, and evaluation, as applied to accounting, basic business, business communication, computer education, entrepreneurship and marketing education, shorthand, typewriting/keyboarding, and word processing. Special attention given to identifying the needs of students in multicultural and mainstreamed settings. Includes a preclinical component. PRQ: MGBE 492 and 6 semester hours in graduate professional education, or consent of department.

536. STRATEGIES IN TEACHING ENTREPRENEURSHIP EDUCATION (1-3). A study of the instructional strategies and materials used in entrepreneurship education and evaluation of research. Content areas: contributions of entrepreneurship to the American economy, career options, implementation models, resources for program development, and an overview of successful teaching strategies at various educational levels.

558. INTERNSHIP (3-7). For the student who has exhibited superior characteristics of leadership, business experience, or potential success as an educator. A full semester required under the supervision of a member of the university business education department in a junior high school, secondary school, community college, or similar institution. A maximum of 3 semester hours may be included in a master's degree program. May be repeated to a maximum of 7 semester hours. PRQ: Consent of department.

585. STUDENT TEACHING (SECONDARY) IN BUSINESS EDUCATION (7). Student teaching for a minimum of 10 weeks full time during one semester. Assignments to be arranged with major department. S/U grading. See "Regulations Governing Student Teaching Assignments" for other regulations. PRQ: MGBE 525 or consent of department.

590. TOPICS IN BUSINESS EDUCATION (1-3). An in-depth study of an area of business education not available as a current course. Topics explored through the use of a wide variety of instructional strategies and resources. May be repeated to a total of 6 semester hours.

591. WORKSHOP IN METHODS OF TEACHING BUSINESS SUBJECTS (1-3). For experienced teachers of business subjects in secondary and collegiate institutions. New developments in the teaching of various business subjects studied through discussion, demonstration, and practice supplemented by presentations from specialists in the field. May be repeated to a maximum of 6 semester hours.

Business Education (MGBE)

492. ORIENTATION TO BUSINESS TEACHER EDUCATION (1). An orientation to the teaching profession with emphasis on business teacher education. Includes philosophical foundations, curriculum structures, foundations of methodology, instructional materials and media, employment requirements, and career opportunities, and professional organization of department.

499. TEACHING METHODS IN BUSINESS EDUCATION (3). A seminar in methods of teaching business subjects, with emphasis on curriculum planning; teaching/learning strategies; instructional resources available; application of research findings, and current thought, trends, and issues.

750. INTERNSHIP (1-3). For experienced teachers of business subjects in secondary and collegiate institutions. New developments in the teaching of various business subjects studied through discussion, demonstration, and practice supplemented by presentations from specialists in the field. May be repeated to a maximum of 6 semester hours.
594. DIRECTED PARTICIPATION IN BUSINESS EDUCATION (2).
Prospective business teachers work with business teachers in public high
schools or other educational institutions. Students participate in all
instructional activities available in the schools, including the actual
organization and implementation of learning plans. Videotaping utilized
as an analysis technique. PRQ: Consent of department.

599A. MASTER'S THESIS OR DIRECTED RESEARCH IN BUSINESS
EDUCATION (3-6). Designed to utilize research skills and techniques
through writing and developing papers and projects. A student must select,
complete, and present in approved written form one or more projects or
papers based on significant problems. May be repeated to a maximum
of 6 semester hours. PRQ: MGBE 500, MGBE 501, or consent of
department.

599C. INDEPENDENT STUDY IN BUSINESS EDUCATION (1-6). For
students who wish to pursue individual study and analysis of problems in
business education of particular interest and value to the students. May
be repeated to a maximum of 6 semester hours. Not available for S/U
grading.

600. SEMINAR IN BUSINESS EDUCATION (3). The forces, issues,
principles, practices, procedures, and problems of establishing and
maintaining quality business education at all levels. Investigation of
problems of special interest to students within the field of business
education. PRQ: Consent of department.

605. READINGS IN BUSINESS EDUCATION (3). Special readings useful
to a student's individual program and objective, but not available in regular
course offerings. May be repeated to a maximum of 3 semester hours.
PRQ: Consent of department.

639. SEMINAR IN TEACHING COLLEGE BUSINESS SUBJECTS (3).
The teaching of business administration at the college level. The problems,
principles and techniques of effective instruction in teaching college
business subjects. Problems and cases covering objectives, instructional
procedures, measurement, and evaluation.

640. BUSINESS EDUCATION IN POSTSECONDARY INSTITUTIONS
(3). Program development and evaluation, instruction, and staffing in
community colleges, four-year colleges and universities, and other post-
secondary institutions.

645. RESEARCH IN BUSINESS EDUCATION (3). Advanced methods
and techniques of research involving statistical analysis and data
processing methods employed in the investigation of business education
problems. Study and analysis of significant research in business
education. PRQ: MGBE 501 and EPSY 522, or consent of department.

699. DOCTORAL RESEARCH AND DISSERTATION (1-12). Student must
accumulate 24 semester hours prior to graduation. May be repeated to a
maximum of 36 semester hours.
Department of Marketing (MKTG)

Chair: Peter F. Kaminski

Graduate Faculty

Douglas J. Ayers, assistant professor, Ph.D., University of Kentucky
Carol W. Demoranville, assistant professor, Ph.D., Virginia Polytechnic Institute and State University
Geoffrey L. Gordon, associate professor, Ph.D., University of Kentucky
Nessim Y. Hanna, professor, Ph.D., University of Illinois
Peter F. Kaminski, professor, Ph.D., Pennsylvania State University
Askari H. Kizilbash, professor, Ph.D., University of Nebraska
Rick E. Ridnour, associate professor, Ph.D., Iowa State University
Denise D. Schoenbacher, associate professor, Ph.D., University of Kentucky
Tanuja Srivastava, assistant professor, D.B.A., Southern Illinois University
Dan C. Weilbaker, associate professor, UARCO Professor of Sales, Ph.D., University of South Carolina

Course List

445. ADVANCED MARKETING RESEARCH (3). The development and administration of various data collection instruments, the evaluation of the advantages and disadvantages of different data collection methods, the statistical and computer analysis of data, and the oral and written presentation of the results of surveys and/or experiments. PRQ: MKTG 443 or consent of department.

455. DATABASE MARKETING MANAGEMENT (3). An intensive examination of the concepts and tools to manage and effectively utilize a marketing information system. Emphasis on using database information in a marketing context. Topics include sources of marketing data, the use of statistical tools to identify marketing opportunities, the use of mapping tools in marketing, and an introduction to neural networking and its use in marketing information systems. PRQ: MKTG 355 or consent of department.

467. INTERNATIONAL BUSINESS (3). An examination of international marketing in the context of a firm's international operations, stressing organization, economic, and marketing analysis. Emphasis on the multinational firm. PRQ: MKTG 310, or UBUS 310 and UBUS 311; and MKTG 367; or consent of department.

475. BUSINESS MARKETING STRATEGY (3). Advanced concepts of business marketing management and decision-making. Focus on developing quality customer service relationships through planning, analysis, industrial research, computer information systems, and marketing technology. PRQ: MKTG 310, or UBUS 310 and UBUS 311, MKTG 325, and MKTG 345; or consent of department.

490. CURRENT ISSUES IN MARKETING (1-3). A study of new developments in marketing, including current topics and issues. A research paper or project also is required. PRQ: Consent of department.

505. GRADUATE SURVEY OF MARKETING (2). A comprehensive survey analysis of marketing functions, institutions, policies, and problems designed specifically to serve the needs of graduate students with no previous formal marketing education.

550. PERSONAL SELLING FOR MANAGERS (3). Designed for students who have not had full-time sales experience and/or have not had a previous course in personal selling. Includes basic theories and techniques for the selling of self, ideas, and proposals within the firm as well as externally to customers and prospects; selling skills for both dyadic and group situations; and presentations by students in a variety of business related selling situations. PRQ: MKTG 505 and consent of department.

595. INTERNSHIP IN MARKETING (3). Designed primarily for students lacking full-time marketing experience. The student works for a summer or a semester as an intern in an organization. No more than 3 semester hours may be applied to M.B.A. Phase Two program requirements. S/U. PRQ: Completion of M.B.A. Phase One requirements and consent of department.

599. MASTER'S THESIS (1-6). Open to students writing a thesis under the M.S. or M.B.A. program. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours.

603. MARKETING RESEARCH AND ANALYSIS (3). Reviewing, evaluating, and analyzing research currently being reported in the literature, the development of research design, the use of research to improve managerial decisions, and the use of research at all levels within both profit and not-for-profit organizations. Ethical issues involving marketing research. PRQ: MKTG 505 and OMIS 524, or consent of department.

604. INDEPENDENT STUDY IN MARKETING (3). Available to graduate students of demonstrated capability for intensive independent study in marketing. Not available for S/U grading. PRQ: MKTG 505 and consent of department.

625. BUYER BEHAVIOR (3). Customer evaluation and description drawing on tools and concepts from psychology, sociology, economics, and related social sciences, as these aid in developing marketing strategies. PRQ: FINA 500 and MKTG 505, or consent of department.

646. SALES ADMINISTRATION (3). Strategic planning, analysis, policy development, implementation, and coordination of corporate-level sales responsibilities. Topics include sales organizational structures and supervisory roles of the recruiting, selecting, testing, training, and managing of salespersons. Emphasis on policy considerations at the sales director and vice president level. PRQ: MKTG 446 and MKTG 505, or consent of the department.

654. MARKETING MANAGEMENT (3). Analysis of the strategic marketing problems confronting managers in the evaluation of marketing opportunities, selection of target markets, development of marketing strategies, planning of marketing tactics, and implementation and control of the marketing effort. PRQ: All Phase One courses, MGMT 625, and MGMT 630, or consent of department.

655. PROMOTIONAL STRATEGY (3). Designing, implementing, and controlling promotional policies, including the elements of personal selling, sales management, advertising, sales promotion, publicity, and public relations. Planning and coordinating complete marketing campaigns. PRQ: MKTG 505 or consent of department.

665. MARKETING STRUCTURES AND PRICE POLICIES (3). Comprehensive guidance for formulating pricing strategy. Emphasis on the actual pricing decision process and the procedures used for pricing consistent with the economics of profit maximization. Incorporates the psychological aspects of price sensitivity and acknowledges that managers have only limited, imprecise information as a basis for their pricing decisions. PRQ: FINA 500 and MKTG 505, or consent of department.

675. STRATEGIC MARKETING PLANNING (3). Presents and integrates analytical techniques that facilitate marketing analysis and the development and implementation of marketing plans. Details formal strategic marketing planning methods. PRQ: MKTG 654 or consent of department.
Master of Science in Management Information Systems

The M.S. program in management information systems combines the technical area of computer science with business administration. The purpose of the program is to prepare students to assume administrative and managerial roles in the field of management information systems.

Phase One

See requirements listed under "Graduate Study in Business."

In addition to Phase One requirements, the student must demonstrate proficiency in a business applications oriented computer programming language acceptable to the management information systems faculty (COBOL for example) either by work experience or the satisfactory completion of appropriate course work.

Any course that satisfies the proficiency listed above may not be counted as an elective in Phase Two.

Phase Two

The student is required to complete a minimum of 30 semester hours of work beyond Phase One and the baccalaureate degree. Of these 30 semester hours, 21 must be in classes reserved exclusively for admitted graduate students.

Students-at-large are normally prohibited from registering for graduate business courses. The total credit from courses taken for graduate credit at other accredited institutions which are accepted in transfer plus credit earned at NIU as a student-at-large may not exceed 9 semester hours.

Required Courses

OMIS 649, Business Computer Operating Systems (3)  
OMIS 651, Business Systems Analysis and Design (3)  
OMIS 652, Business Applications of Data Base Management Systems (3)  
OMIS 660, Business Telecommunications (3)  
OMIS 661, Business Decision Support Systems (3)  
OMIS 690, Information Systems Management (3)  
OMIS 697, Seminar in Management Information Systems (3)

With the approval of the advisor or chair of the Department of Operations Management and Information Systems, other courses may be substituted for a maximum of 9 semester hours of Phase Two course work.

Electives (9)

Selected with the approval of the student's advisor from among relevant graduate offerings in the department or elsewhere in the university. OMIS 695, Internship in Management Information Systems, should not be taken as the last course in the program.

Course List

505. PRINCIPLES OF OPERATIONS MANAGEMENT (2). An examination of the issues, problems, and possible solutions for operations managers in the manufacturing and service environments. Topics include product planning, facility location, process design, capacity planning, quality management, inventory management, and operations planning and control systems. PRQ: OMIS 524 or consent of department.

507. BUSINESS INFORMATION SYSTEMS (2). An introduction to business information systems concepts, uses, and issues, including functional management information systems, end-user computing, technology, platforms, and systems analysis and design. Emphasis on the effective utilization of information system technology by business professionals.

524. BUSINESS STATISTICS (2). Descriptive statistics: probability, random variables, and probability distributions; sampling and sampling distributions; estimation and hypothesis testing; simple regression and correlation analysis. Applications to industry and business. PRQ: MATH 210 or consent of department.

604. INDEPENDENT STUDY IN OPERATIONS MANAGEMENT (1-3). Available to graduate students who have demonstrated the capability for specialized independent study in operations management. May be repeated to a maximum of 6 semester hours. Not available for S/U grading. PRQ: Consent of department.

605. INDEPENDENT STUDY IN INFORMATION SYSTEMS (1-3). Available only to candidates for the M.S. degree in management information systems who have demonstrated the capability for specialized independent study in information systems. May be repeated to a maximum of 3 semester hours. Not available for S/U grading. PRQ: Consent of department.

621. COMPUTER SIMULATION IN BUSINESS (3). An advanced course covering the concepts and techniques of computerized models. Emphasis on the practical application of computer simulation to business problem solving. Laboratory exercises and projects focusing on the design, construction, documentation, and application of computer simulation models. PRQ: OMIS 505 and OMIS 524, or consent of department.
624. EXPERT SYSTEMS IN BUSINESS (3). An examination of the new generation of expert systems and their impact on management information technologies and business applications. Topics include a review of expert systems in use, the application of these expert systems to business decision making, and the structure of an expert system in business. Students design and program a prototype expert system for business decisions. CRQ: OMIS 651 or consent of department.

627. OPERATIONS ANALYSIS (3). An analysis of the conceptual and analytical approaches to the solution of significant operations problems. Emphasis on case analyses and quantitative solutions with a global competitive environment. PRQ: OMIS 505, MGMT 625, and MGMT 630, or consent of department.

628. MANAGEMENT SCIENCE TECHNIQUES FOR MANAGERIAL ANALYSIS (3). The development and application of quantitative methods such as linear programming, inventory, waiting line theory, simulation, and model building to provide a basis for rational decision-making in the allocation of resources within the various functional areas of the firm, with emphasis on production. PRQ: OMIS 505 and OMIS 524, or consent of department.

640. MANAGEMENT OF INFORMATION SYSTEMS TECHNOLOGY (3). Applications of information systems in strategic decision making and organizational leadership, management of information as an organizational resource, and global and ethical issues relating to information systems technology. PRQ: OMIS 507 or consent of department.

642. QUALITY MANAGEMENT (3). Detailed examination of the issues, techniques, and methodologies for planning and controlling continuous quality improvement in manufacturing and service organizations. A student project in continuous quality improvement required. PRQ: OMIS 505 and OMIS 524, or consent of department.

643. CONTINUOUS IMPROVEMENT SYSTEMS IN QUALITY MANAGEMENT (3). Focus on continuous improvement in both service and manufacturing firms, with major focus on managerial problem solving with emphasis on philosophies and methodologies in experimental design. Topics include the Shewhart Cycle, Deming, fractional factorials, Taguchi designs, EVOP, and response surfaces. PRQ: OMIS 524 or consent of department.

649. BUSINESS COMPUTER OPERATING SYSTEMS (3). A study of operating systems for various business computing environments. Involves the study of single-processor operating systems as well as exploration of key differences in distributed operating systems. Review of key literature in the area; case analysis of current problems and trends. Laboratory experience with a variety of operating systems. PRQ: OMIS 507 or consent of department.

651. BUSINESS SYSTEMS ANALYSIS AND DESIGN (3). A comparison of various methodologies and techniques used in the analysis and design of business systems with emphasis on the selection of a design methodology appropriate to various business problems within different business organizational environments. Includes projects that utilize these analysis and design techniques in planning and developing business systems. PRQ: OMIS 507 or consent of department.

652. BUSINESS APPLICATIONS OF DATA BASE MANAGEMENT SYSTEMS (3). Critical examination of several commercially available data base management systems in terms of objectives, functions, types, and applications in business. Review of research comparing and evaluating managerial applications of data bases. Applications involve data base applications in accounting and finance, manufacturing, marketing, personnel, and other managerial and executive-level information systems. PRQ: OMIS 507 or consent of department.

660. BUSINESS TELECOMMUNICATIONS (3). Examination of the field of business telecommunications from the perspective of business applications. Evaluation of hardware needed for effective business telecommunication. Includes projects that require examination of communications systems requirements and selection of techniques suitable for meeting the system requirements. Not available to students with credit in OMIS 460 or equivalent. PRQ: OMIS 507 or consent of department.

661. BUSINESS DECISION SUPPORT SYSTEMS (3). The theoretical base for understanding business decision making, followed by a review of commercially available decision support system software packages. Special attention given to concepts and tools for assisting managers in the decision process in semi-structured tasks. PRQ: OMIS 640 or OMIS 651, or consent of department.
College of Education

Dean: Alfonzo Thurman, Ph.D.
Associate Dean: Elliott Lessen, Ph.D.
Assistant Dean: Corenna C. Cummings, Ph.D.

Department of Curriculum and Instruction
Department of Educational Psychology, Counseling, and Special Education
Department of Leadership and Educational Policy Studies
Department of Physical Education

Basic Skills Testing

Successful completion of the Pre-Professional Skills Tests or the Computer-Based Academic Skills Assessments (PPST/Praxis I) or the Illinois Certification Testing System (ICTS) Basic Skills Test is required for entry into most teacher certification programs and is listed as a prerequisite for many professional courses. The PPST and Praxis I bulletins and applications are available at the Office of Testing Services. Students who intend to enter a teacher certification program and need to take one of these test series should register for and take the PPST/Praxis I or the ICTS Basic Skills Test as soon as possible.

Admission

Specific admission requirements are described in the departmental and program sections in the following pages. To be assured of consideration for admission, a prospective student must submit an application to the Graduate School no later than June 1 for the fall semester, November 1 for the spring semester, and April 1 for the summer session. Only complete applications containing all required data (application forms, official transcripts, GRE General Test Scores, and letters of recommendation) are considered.

Applicants denied admission may request reconsideration on the basis of additional evidence and/or information not previously submitted. Such requests shall be in writing and directed to the appropriate program admissions committee. Decisions of program admissions committees may be appealed to the Admissions, Retention, and Professional Standards Committee of the department. Such appeals shall be in writing and should explain the basis for the appeal.

Retention

Students are responsible for meeting the professional standards of the College of Education and its respective departments and programs of study. The following requirements apply to all students.

Students must remain in good academic standing in the Graduate School, are required to maintain high ethical standards, and must demonstrate evidence of functional competency in fulfilling the professional roles required by the discipline.

Doctoral students must pass a candidacy examination which requires an ability to deal with more than individual course content. Satisfactory completion of comprehensive examinations requires analysis, synthesis, and integration of the content within a discipline. Doctoral students must also develop, complete, and defend an acceptable dissertation following the guidelines of the Graduate School and the program in which they are enrolled.

Consult specific program sections of this catalog for additional requirements.

Concentration in Higher Education

The concentration in higher education is an interdisciplinary program which fosters research and teaching, and service related to higher education. The graduate concentration in higher education permits the study of administration, student personnel services, aspects of the community college experience, and curriculum development in higher education. Since the higher education concentration is not a degree program, all graduate degrees are obtained through the student’s major department, whose special requirements must be met. This concentration is available to graduate-level students in good academic standing.

A student who wishes to pursue the concentration must receive approval and advisement from his or her program adviser and from the coordinator of the higher-education concentration. Students may earn a transcript notation of the concentration by completing 18 hours in approved courses, including the three required core courses, and, with prior approval of the concentration coordinator, an internship for those without substantive work experience in higher education.

Requirements

LEFE 623, History of Higher Education (3)
LEEA 670, The Administration of Higher Education (3)
CISC 657, Seminar in Higher Education (3), OR LEAA 650, Seminar in Educational Administration (3)

Electives from the following (6-9)
CIRE 619, Principles and Methods of Teaching Postsecondary Reading (3)
CISC 550, Seminar in the Community College (3)
CISC 651, Community College Student Personnel Services (3)
EPCO 509, Culture of the College Student (3)
EPCO 572 or EPSY 572X, Assessment Methods in Higher Education (3)
EPCO 601, Personnel Services in Higher Education (3)
EPCO 602, Student Development in Higher Education: Theory and Practice (3)
LEAC 568, Continuing Higher Education (3)
LEEA 671, Legal Aspects of Higher Education Administration (3)
LEEA 672, Business Management in Higher Education (3)

Individualized study (0-3)
CISC 686C, Advanced Internship: Community College or Higher Education (1-12)
LEAC 686, Internship in Adult Continuing Education (3)
LEEA 686, Internship in Educational Administration (3)

1One of these courses may be applied toward meeting the requirements of the concentration, with the approval of the program adviser, if the course topic is directly related to higher education.
LEIT 560, Instructional Design I (3)
LEIT 562, Instructional Design II (3)
LEIT 686, Internship in Instructional Technology (3)

Teacher Certification

In order to be certified to teach or supervise in the public schools of the state of Illinois, a person must be of good character, in sound health, a citizen of the United States, and at least 19 years of age. The Illinois certification law also requires that an individual complete an approved teacher preparation program at a recognized institution.

The dean of the College of Education, as the university's certification officer, is responsible for reviewing the record of each graduate of an approved teacher education program and for recommending or withholding recommendation of that individual for certification by entitlement and endorsement. Certification is not an automatic procedure. In order to qualify for certification, each student in an entitlement program must complete an application for certification and provide evidence of having completed the general requirements; courses in professional education appropriate to the program being followed, including a minimum of 100 clock hours of approved pre-student-teaching clinical experience prior to student teaching; and a teacher education approved field of study: early childhood, elementary, special education, secondary (6-12), or special (K-12–art, music, physical education).

A listing of teacher education programs approved by the Illinois State Board of Education may be found in the Undergraduate Catalog under “Teacher Certification Requirements.” Questions regarding teacher certification may be directed to the teacher certification coordinator in the appropriate academic unit or to the university's Teacher Certification Coordinator.

The following certification and endorsement programs are available at the graduate level only and are approved by the Illinois State Board of Education.

Special K-12
Behavior Disorders
Media
Reading

School Service Personnel
Guidance

Administrative
General Supervisory
General Administrative
Superintendent
Chief School Business Official

Questions about certification may be referred to the programs with responsibility for administering each certification or endorsement program.

Other certification programs available only at the graduate level are school psychologist (Department of Psychology) and speech and language impaired (Department of Communicative Disorders).

Student Teaching in the College of Education

Regulations Governing Student Teaching Assignments

All assignments are limited by the programs and facilities available in the cooperating schools, and the amount of credit given is determined by the type of assignment. Students must be recommended for an assignment by the chair of their department or the designated departmental representative. Graduate applicants must be approved by the department offering their graduate degree and the department in which they will be doing their student teaching.

Graduate students must have been admitted to the Graduate School, have earned a minimum of 12 semester hours at NIU, and have an overall NIU minimum 3.00 GPA.

A student must have been admitted to teacher education, have satisfactorily completed pre-student-teaching clinical experiences, and apply for a student teaching assignment in advance. A student must also have met the specific requirements in the subject matter department and maintained the required departmental GPA or better.

A student may not request a change once an assignment is confirmed by the cooperating school.

Retention

Admission to the program does not guarantee continued acceptance unless the student maintains satisfactory grades and other qualifications. In recognition of its responsibility to the schools in which its graduates teach, the university maintains a program of selective retention of candidates for the teaching profession. Thus, the university seeks to avoid recommending a candidate for a student teaching assignment or certification unless the candidate has good character, sound mental and physical health, and academic competence in his or her overall studies, teaching field(s), and professional studies. Instructors involved in any of the undergraduate professional sequence of courses may request that a student be dropped from teacher education for deficiencies in grades, attitudes, or professional skill.

Retention in a student teaching assignment depends on the student teacher’s ability to demonstrate those competencies associated with effective teaching, including factors such as organization of materials, motivational techniques, classroom management, interpersonal relationships, and professional ethics. Assessment will be made by the student teacher's supervisors through observation and conferences with the student teacher in a clinical situation.

Office of Human Resource Development and Workforce Preparation

The mission of the Office of Human Resource Development and Workforce Preparation is to interpret as well as create knowledge that connects the realms of education and work. The mission is closely aligned with NIU's role—the pursuit of excellence in teaching, research, and service. These complementary functions are the responsibility of the office as it strives to serve the continuing educational needs of human resource development professionals. Personnel in this office conduct research, disseminate findings, and provide other services to the human resource development community. Services provided by the office will regularly evolve to reflect the changing nature of the United States' workforce—one that is being redefined with increasing levels of complexity, uncertainty, and diversity.
Department of Curriculum and Instruction (CI- -)

Chair: Norman A. Stahl

Graduate Faculty

Gloria Alter, assistant professor, Ed.D., Northern Illinois University
June E. Barnhart, associate professor, Ph.D., Northwestern University
Emily Bevington, assistant professor, Ph.D., University of Illinois, Chicago
Chrs L. Carger, assistant professor, Ph.D., University of Illinois, Chicago
Gwen Countrymen, assistant professor, Ph.D., University of Iowa
Nina G. Dorsch, assistant professor, Ph.D., Miami University
Laurie Eish-Piper, assistant professor, Ph.D., University of Arizona
Pamela J. Farris, professor, Presidential Teaching Professor, Ph.D., Indiana State University
Constance Goode, assistant professor, Ph.D., University of Wisconsin
Dennis D. Gooler, professor, Ph.D., University of Illinois
Jerry L. Johns, professor, Distinguished Teaching Professor, Ph.D., Michigan State University
Cheryl Kish, assistant professor, Ph.D., University of Toledo
Clifford E. Knapp, professor, Ph.D., Southern Illinois University
James H. Moss, associate professor, Ed.D., Ball State University
Judy F. Pickle, associate professor, Ph.D., University of Illinois
Donald J. Richgels, professor, Ph.D., University of Wisconsin
Carla C. Shaw, associate professor, Ph.D., Southern Illinois University
Deborah A. Simmons, associate professor, Ph.D., University of Michigan
Rosemarie Slavenas, associate professor, Ed.D., Northern Illinois University
Christine Sorensen, assistant professor, Ph.D., Iowa State University
Norman A. Stahl, professor, Ph.D., University of Pittsburgh
Billie J. Thomas, associate professor, Ph.D., University of Minnesota
Thomas E. Thompson, associate professor, Ed.D., Oregon State University
Carl M. Tomlinson, professor, Ph.D., Florida State University
Robert L. Vogl, associate professor, Ph.D., University of Michigan
Sonia Vogl, associate professor, Ph.D., University of Michigan
Terry Whealon, associate professor, Ed.D., Indiana University
Donna L. Wiseman, LD and Ruth G. Morgride Chair in Teacher Education and Preparation, Ph.D., University of Missouri

Doctor of Education

Curriculum and instruction with specialization in
Curriculum and supervision
Elementary education
Reading
Secondary education

Admission

The Department of Curriculum and Instruction seeks to select the best-qualified applicants for admission to its programs. When the number of applicants to any program exceeds its capacity, even qualified applicants may be denied admission and encouraged to reapply at a later date.

Applicants to graduate programs in the Department of Curriculum and Instruction may submit scores from the Miller Analogies Test (MAT) in lieu of GRE scores.

Decisions about admission to programs in the department are ordinarily made at least once each term. To be assured of consideration, completed applications containing all required data (application forms, official transcripts, GRE or MAT scores, and letters of recommendation) must be received by the Graduate School no later than June 1 for admission for the fall term, November 1 for admission for the spring term, and April 1 for admission for the summer session.

Any applicant who is denied admission to a program may submit to the department chair a written request for reconsideration by the admissions committee that includes information not previously submitted. Final decisions of admissions committees may be appealed to the department's Academic Appeals Committee. Appeals to this committee must be in writing and must explain the basis for the appeal.

Retention

Students must remain in good academic standing in the Graduate School, maintain high ethical standards, and demonstrate evidence of functional competency in fulfilling the professional roles required by the discipline.

Doctoral students must pass a candidacy examination which requires an ability to deal with more than individual course content. Satisfactory completion of comprehensive examinations requires analysis, synthesis, and integration of the content within a discipline. Doctoral students must also develop, complete, and defend an acceptable dissertation following the guidelines of the Graduate School and the program in which they are enrolled.

Internships

The Department of Curriculum and Instruction currently offers internships in community college, curriculum and supervision, elementary education, early childhood education, secondary education, outdoor teacher education, and reading. For further information and internship possibilities see course descriptions and consult with an adviser.
Master of Science in Education

Admission

An applicant for admission is generally expected to have a baccalaureate degree and provide at least two letters of recommendation from professors, employers, or supervisors which provide supportive evidence of an applicant's professional qualifications.

Prospective students who fail to satisfy the GPA criterion may request special consideration of their applications. Such a request must be in writing, must include compensatory evidence related to the deficiency, and should accompany the application for admission to the Graduate School. Decisions regarding admission are made by departmental program committees on the basis of a total profile of an individual's qualifications. Appeals of a decision made by the admissions committee may be made to the department's Academic Appeals Committee. Appeals to this committee must be in writing and must explain the basis for the appeal.

Deficiency Study/Field Work

In cases in which a student's background in the chosen specialty is limited, the individual may be required to fulfill deficiency requirements. Generally, course work is required of an individual seeking a doctorate whose master's course work was in another specialty area or field.

Supervised field work is sometimes required in a given program of study especially when, in the adviser's judgment, it is necessary to prepare the student in a chosen specialty.

General Requirements

Major in Curriculum and Instruction
Specialization in curriculum and supervision
Specialization in outdoor teacher education
Specialization in secondary education

Programs of study will include a minimum of 30 semester hours, of which a minimum of 15 semester hours must be within the major. Students elect either the non-thesis or thesis option.

Non-Thesis Option

One graduate-level course in research approved by the student's adviser (3) One graduate-level course in foundations of education approved by the student's adviser (3)

Two of the following (6)
- CIOE 500, Principles and Concepts of Outdoor Education (3)
- CISC 500, Organization of Curriculum (3)
- CISE 534, Improvement of Instruction (3)

Additional area and elective course work approved by the student's adviser.

The successful completion of a comprehensive examination.

Students in outdoor teacher education must include a minimum of 6 semester hours from the following courses.

CIOE 520, Environmental Quality Education (3)
CIOE 521, Outdoor Interpretation (3)
CIOE 524, Teaching Environmental Ethics (3)
CIOE 526, Teaching Natural Sciences in the Outdoors (3)
CIOE 534, Integrating Community Resources into Curriculum and Instruction (3)
CIOE 586, Internship in Outdoor Education (1-6)

Thesis Option

Same as the non-thesis except that a minimum of 6 semester hours of program course work must be devoted to the master's thesis.

Major in Reading

Majors in early childhood education and in reading can choose either the non-thesis or thesis option. In each major and for both options, the requirement is a minimum of 30 semester hours.

Non-Thesis Option

EPSY 520, Introduction to Educational Research (3)
Two of the following (6)
- EPSY 501, Psychological Foundations of Education (3)
- LEFE 500, Sociological Foundations of Education (3)
- LEFE 510, Philosophical Foundations of Education (3)
- LEFE 520, Historical Foundations of Education (3)
- LEFE 521, Historical Foundations of American Education (3)
- LEFE 530, Introduction to Comparative/International Education (3)

A minimum of 15 semester hours in the student's major field and 6 semester hours of elective course work, approved by the student's adviser. The successful completion of a comprehensive examination.

Thesis Option

Same as the non-thesis option except that a minimum of 6 semester hours of program course work must be devoted to the master's thesis.

Major in Early Childhood Education

Majors in early childhood education can choose either the non-thesis or thesis option. In both options the requirement is a minimum of 33 semester hours.

Non-Thesis Option

CICI 501, Multicultural Education: Methods and Materials (3)
CIEE 530, The Teaching of Social Studies in the Elementary School (3)
CIEE 532, Teaching Science in the Elementary School (3)
CIEE 540, Teaching Language Arts in the Elementary School (3)
CIEE 560, Seminar in Elementary Education (3)
CIEE 587, Teaching Practicum in Elementary Education (3)
EPSY 520, Introduction to Educational Research (3)
MATH 502, Topics for Teachers of Elementary School Mathematics (3)

One of the following (3)
- EPSY 501, Psychological Foundations of Education (3)
- EPSY 500, Social Foundations of Education (3)
- EPSY 510, Philosophical Foundations of Education (3)
- LEFE 520, Historical Foundations of Education (3)
- LEFE 521, Historical Foundations of American Education (3)

Course work in an area of study as approved by the student's adviser.

The successful completion of a comprehensive examination.

The major in curriculum and instruction with a specialization in curriculum and supervision provides the student with information to develop competence in supervisory techniques, curriculum theory and practice, cooperative planning for improvement of instruction, coordination of educational media utilization, and evaluation of programs of curriculum improvement. This area is especially appropriate for the person desiring to meet the requirements for the Type 75 General Supervisory Endorsement to the administrative certificate in compliance with the State of Illinois School Code, or for those persons whose goal is the improvement of instruction, regardless of level of teaching.
The major in Curriculum and Instruction with a specialization in outdoor teacher education provides specialized study in using community and natural out-of-classroom resources to enhance the school curriculum and informal education programs. This specialization is designed to prepare individuals for teacher or interpreter roles in a variety of outdoor instructional environments, and as specialists or administrators for outdoor programs and facilities in day-use or residential settings.

The major in curriculum and instruction with a specialization in secondary education is intended for entering or practicing teachers who wish to develop the teaching skills and the informed understanding of the major issues and trends in secondary education that mark the master teacher. This specialization concentrates on intensive clinical study of instructional and classroom dynamics models, and on study of conditions within the field.

The major in early childhood education offers focused study to strengthen and broaden the professional preparation of teachers of young children, birth through eight years. Students pursuing the M.S.Ed. may also choose course work to meet Early Childhood Illinois Type 04 Certification requirements to teach children from birth through grade 3 in Illinois public schools. Students may also elect course work to fulfill special education approval requirements for teaching exceptional children birth through age six.

The major in elementary education emphasizes focused study to strengthen and broaden the professional preparation of teachers for the elementary school. In addition to the basic requirements, course work will be determined on the basis of the individual student's undergraduate preparation, experience, and professional goals. Students enrolled in this M.S.Ed. program may also complete all requirements for the Type 03 Illinois Elementary Education Certificate to teach grades kindergarten through 9.

The major in reading prepares experienced teachers in diagnosing reading problems and providing remedial treatment to individual pupils. Teachers with such training and experience are in demand to function as remedial reading teachers and, after broader experience, to serve as coordinators of reading programs in elementary, middle, and secondary schools. Students enrolled in the reading program can complete all requirements for the endorsement to serve as a special reading teacher in the state of Illinois.

Certification and Endorsement at the Graduate Level

K-12 reading specialist certification is designed for teachers who wish to gain additional competencies which will enable them to work effectively with learners, teachers, and K-12 school-community personnel in improving reading instruction in the schools. Students who wish to make application for certification and/or endorsement should contact the Department of Curriculum and Instruction for further information.

The M.S.Ed. program in early childhood education with certification is designed for students pursuing the Early Childhood Illinois Type 04 Certification requirements to teach children from birth through grade 3 in Illinois public schools. Students may elect course work to fulfill special education approval requirements for teaching children with disabilities birth through age six.

The M.S.Ed. program in elementary education with certification is designed for students pursuing the Elementary Education Illinois Type 03 Certificate required to teach children kindergarten through grade 9 in Illinois public schools.

The reading endorsement is an 18 hour requirement for all elementary and secondary reading teachers whose major teaching assignment is reading and those secondary teachers who teach reading. This is a teaching qualification on an existing certificate or an endorsement on a new certificate.

The M.S.Ed. with a specialization in curriculum and supervision with general supervisory endorsement is designed for students pursuing the Type 75 General Supervisory Endorsement in compliance with the State of Illinois School Code.

Middle school endorsement requirements for the state of Illinois may be fulfilled by taking courses at the graduate level. Students who wish to take these courses should contact the Department of Curriculum and Instruction for further information.

Doctor of Education in Curriculum and Instruction

Specialization in Curriculum and Supervision
Specialization in Elementary Education
Specialization in Reading
Specialization in Secondary Education

This is a professional degree intended to prepare superior teachers, administrators, service personnel, and scholars of education. In addition to other functions, the program provides individuals for teaching at the college level. Students majoring in curriculum and instruction may pursue specializations in curriculum and supervision, elementary education, reading, or secondary education. Preparation for research responsibilities both as producer and as consumer is an integral part of each program.

The procedures of initial application are similar to those listed for the master's degree; however, the applicant is also required to provide additional interviews and letters of recommendation and to take aptitude tests, as stated elsewhere in this catalog. Where significant deficiencies are found by the student's advisory committee, additional semester hours above the 93 required for the doctoral degree may be prescribed.

Applicants for the Ed.D. program are expected to have a broad base of general education in the humanities, sciences, and social sciences and are required to present evidence of a minimum of three years of acceptable professional experience.

Admission

An applicant for admission is generally expected to have a minimum GPA of 3.20 in previous graduate work, a combined score of 1000 or better on the verbal and quantitative sections of the General Test of the GRE. In addition, the score on the analytical ability subtest of the GRE will be used as evidence of aptitude.

three letters of recommendation from professors, employers, or supervisors which provide supportive evidence of an applicant's professional qualifications.

satisfactory academic and professional progress as indicated by data included in the application for admission to the Graduate School.

Demonstration of writing competencies and participation in a preadmission interview is required of qualified applicants before a final admission decision is made.

Prospective students who fail to satisfy either the GPA or the GRE criterion may request special consideration of their applications. Such a request must be in writing, must include compensatory evidence related to the deficiencies, and should accompany the application for admission to the Graduate School. Final decisions regarding admissions are made by departmental program committees on the basis of a total profile of an individual's qualifications. Appeals of a decision made by the program committee may be made to the department's Academic Appeals Committee. Appeals to this committee must be submitted in writing to the department chair and must explain the basis for the appeal.
Deficiency Study

In cases in which a student's background in his or her chosen specialty is limited, the individual may be required to fulfill deficiency requirements.

General Requirements

The Department of Curriculum and Instruction requires the equivalent of at least three years of full-time academic work, or a minimum of 93 semester hours of graduate work beyond the baccalaureate degree including the following:

- CISC 500, Curriculum Design (3)
- CISC 604, Research Seminar in Curriculum and Instruction (3)
- CISE 634, Design of Instructional Models (3)

A minimum of 15 semester hours of graduate-level course work in common requirements including research understandings and skills, learning and development theories, and socio-cultural analyses of education.

A minimum of 9 semester hours (excluding dissertation hours) of course work in the student's specialization.

A cognate component selected from outside the specialization to provide a broader base of knowledge, a supportive professional skill, or more sophisticated research competencies.

No specific number of semester hours is required.

A limitation of 30 semester hours on the amount of master's degree work that may be included in a doctoral program of studies.

A dissertation for 15-30 semester hours.

The dissertation represents a substantial contribution to knowledge in the candidate's major field of study. Candidates are expected to conduct original scholarship and independent research appropriate to their major and communicate the results of their research effectively.

Examinations

A candidacy examination will be scheduled and administered at least twice each year. A graduate student eligible to take this examination, with the permission of the chair of the doctoral committee, will have completed at least two-thirds of his or her studies including the common requirements. Dates on which application for the examination can be made will be announced by the Department of Curriculum and Instruction. This examination will encompass both principal areas of professional knowledge, the common requirements, and the special field. Any student who fails may, with the recommendation of the examination committee, be granted the opportunity to take a second examination. The second examination, however, will be final.

A final oral examination related to the dissertation is required and is conducted in accordance with the general requirements of the Graduate School.

Course List

Curriculum and Instruction (CICI)


CICI 510. CRITICAL PRACTICES IN CURRICULUM AND INSTRUCTION (3). The design, analysis, and evaluation of curriculum and instruction. Principles of curriculum and models of instruction as guidelines for the construction of specific curriculum designs and instructional strategies that create learning communities. CRQ: CICI 500 or consent of department.

Curriculum and Supervision (CISC)

CISC 492. SPECIAL TOPICS IN CURRICULUM AND SUPERVISION (1-3).
A. Curriculum
B. Supervision
Study of special topics, announced in advance. May be repeated to a maximum of 9 semester hours when subject varies.

CISC 500. ORGANIZATION OF CURRICULUM (3). The assumptions underlying current curriculum organizations. Decision-making procedures regarding development and evaluation of educational programs.

CISC 502. SURVEY OF RESEARCH IN CURRICULUM (3). Analysis of curriculum research with emphasis on current research studies. PRQ: CISC 500 or consent of department.

CISC 512. IMPROVEMENT OF INSTRUCTION FOR SUPERVISORS (3). An analysis and application of methods used in supervision for the improvement of instruction. Elements of effective teaching are investigated and applied.

CISC 524. ELEMENTARY SCHOOL CURRICULUM (3). A study of the elementary school curriculum, its relationship to society, and present practices in schools.

CISC 525. SECONDARY SCHOOL CURRICULUM (3). A study of the secondary school curriculum, its relationship to society, and present practices in schools.

CISC 526. INTERNSHIP (3-9).
A. Curriculum
B. Supervision
C. Community College
Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 9 semester hours.

CISC 527. TEACHING PRACTICUM (1-6). For those actively engaged in teaching who are interested in improving their teaching skills. Clinical work with the guidance of experienced professionals and consultants in teacher education. Experiences arranged to meet the needs, concerns and interests of each individual. May be repeated to a maximum of 6 semester hours. Does not fulfill the student teaching requirement. PRQ: Consent of department.

CISC 550. SEMINAR IN THE COMMUNITY COLLEGE (3). The development of the junior college movement; its present status, purposes, functions, organization, and curriculum; and the characteristics of the emerging community college movement.

CISC 555. SUPERVISORY BEHAVIOR (3). Crosslisted as LEAA 535X. The theoretical constructs underlying supervisory behavior in educational settings and applications of related principles to the supervision and management of education personnel.

CISC 556. INTERNSHIP (3-9).
A. Curriculum
B. Supervision
C. Community College
Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 9 semester hours.

CISC 557. TEACHING PRACTICUM (1-6). For those actively engaged in teaching who are interested in improving their teaching skills. Clinical work with the guidance of experienced professionals and consultants in teacher education. Experiences arranged to meet the needs, concerns and interests of each individual. May be repeated to a maximum of 6 semester hours. Does not fulfill the student teaching requirement. PRQ: Consent of department.

CISC 590. WORKSHOP (1-3).
A. Curriculum
B. Supervision
C. Community College
Workshop designed for teachers, supervisors, counselors, and administrators to study contemporary issues and problems of the public school. Content varies to provide the opportunity to study current problems. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

CISC 597. INDEPENDENT RESEARCH (1-3).
A. Curriculum
B. Supervision
C. Community College
Independent research at the master's degree level under faculty supervision. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

CISC 599A. MASTER'S THESIS (3-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: EPSY 520.
Early Childhood Education (CICE)

CICE 400. EARLY CHILDHOOD EDUCATION (3). Students will examine the procedures for planning, organizing, and interpreting the learning environment for young children. PRQ: EPSY 314 or consent of department.

CICE 410. TRENDS AND ISSUES IN EARLY CHILDHOOD EDUCATION (3). Focus on the philosophical and psychological aspects of early childhood education as related to contemporary society.

CICE 492. SPECIAL TOPICS IN EDUCATION (1-3). Study of special topics, announced in advance, in education. May be repeated to a maximum of 9 semester hours when subject varies.

CICE 500. ANALYSIS OF INSTRUCTION IN EARLY CHILDHOOD EDUCATION (3). A study of learning continuity in early years.

CICE 510. AMERICAN PRESCHOOL MOVEMENT (3). A study of the development of the American preschool movement.

CICE 511. COMPARATIVE EARLY CHILDHOOD EDUCATION (3). A cross-cultural, multidisciplinary approach to the study of both formal and informal education of children. Emphasis on the content and context of learning in early childhood in contemporary industrial and preindustrial societies.

CICE 521. EDUCATIONAL DIAGNOSIS AND ASSESSMENT OF PRESCHOOL EXCEPTIONAL CHILDREN (3). Special diagnostic procedures appropriate for preschool handicapped children. Emphasis on screening and assessment of handicapping conditions to provide recommendations for corrective procedures. PRQ: FCNS 535 or consent of department.

CICE 522. DEVELOPMENT OF CURRICULUM MATERIALS FOR THE PRESCHOOL EXCEPTIONAL CHILD (3). Resource systems and materials available for the education of the preschool exceptional child. Focus on evaluation, adaptation, and development of curricula. PRQ: CICE 521 or EPSE 540, or consent of department.

CICE 523. SEVERELY HANDICAPPED INFANTS AND PRE-SCHOOLERS (3). A review of the characteristics, identification, educational intervention systems, and adaptive and cognitive behavior of severely handicapped infants and preschoolers. PRQ: FCNS 439 or consent of department.

CICE 526. CURRICULAR STRATEGIES FOR THE EDUCATION OF HANDICAPPED INFANTS (3). Curricular models for instructional intervention for developmentally delayed infants during their first two years of life. PRQ: CICE 523 or consent of department.

CICE 530. LANGUAGE ARTS IN EARLY CHILDHOOD EDUCATION (3). Focus is on language experiences as an integral part of the young child's growth and development.

CICE 531. SOCIAL LEARNING IN EARLY CHILDHOOD EDUCATION (3). Emphasis on social learning for the young child. Principles and procedures in the development of social experiences. Child growth and development, democratic values and processes, and social problems are stressed.

CICE 560. SEMINAR: NEW DEVELOPMENTS IN EARLY CHILDHOOD EDUCATION (3). Philosophy and psychology of early childhood education as related to factors in the contemporary scene.

CICE 586. ADVANCED INTERNSHIP (1-12). A. Curriculum. B. Supervision. C. Community College or Higher Education Work individually in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 12 semester hours. PRQ: Admission to doctoral program, or consent of department.

CICE 596. INDEPENDENT RESEARCH (1-3). Independent research at post-master's degree levels under faculty supervision. May be repeated to a maximum of 6 semester hours.

CICE 599. DOCTORAL RESEARCH AND DISSERTATION (1-15). Student must accumulate 15 semester hours prior to graduation. May be repeated. PRQ: Candidacy for the doctoral degree and consent of chair of doctoral committee.
CIEE 597. INDEPENDENT RESEARCH (1-3). Independent research at the master's degree level under faculty supervision. May be repeated to a maximum of 3 semester hours. PRQ: Admission to master's degree program and consent of faculty member who will direct research.

CIEE 599. MASTER'S THESIS (1-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: EPSY 520.

CIEE 680. SEMINAR IN EARLY CHILDHOOD EDUCATION (3). Identification and analysis of problems and issues in early childhood education. May be repeated to a maximum of 6 semester hours.

CIEE 686. INTERNSHIP (1-12). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 12 semester hours. PRQ: Admission to doctoral program, or consent of department.

CIEE 697. INDEPENDENT RESEARCH (1-3). Independent research at post-master's degree levels under faculty supervision. May be repeated to a maximum of 6 semester hours.

Elementary Education (CIEE)

CIEE 402X. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR GRADES K-9 (3). MATH 402. Methods, techniques, materials, curricular issues, learning theories, and research utilized in the teaching of elementary school mathematics. Attention given to the teaching of exceptional students and to planning for multicultural learning situations, intended for students in education. This course is accepted for credit as an elementary mathematics methods course, but not as an upper-division mathematical content course. Not open for credit toward the major or minor in mathematical sciences. PRQ: MATH 201 with a grade of C or better or consent of department.

CIEE 403X. LANGUAGE DEVELOPMENT IN CHILDREN (3). COMD 403. An overview of oral language acquisition including phonological, morphological, syntactic, semantic, and pragmatic development in children from infancy through adolescence.

CIEE 411. UTILIZING HUMAN RESOURCES FOR ELEMENTARY SCHOOL PROGRAMS (3). The role of the elementary school teacher in developing and managing programs which involve parents and other people in the community.

CIEE 430. CONTEMPORARY LANGUAGE ARTS (3). An introduction to contemporary applied language arts programs. Emphasis on methods, materials, and instructional procedures for elementary school children.

CIEE 431. COMMUNICATION ARTS IN THE ELEMENTARY SCHOOL: NONVERBAL COMMUNICATION (3). Through direct experience students develop an understanding of nonverbal communication, including divergent expression and composition in the elementary school. Theory, principles, and codes of nonverbal communication.

CIEE 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. PRQ: Consent of department.

CIEE 492. SPECIAL TOPICS IN ELEMENTARY EDUCATION (1-3). Study of special topics, announced in advance, in education. May be repeated to a maximum of 9 semester hours when subject varies.

CIEE 501. IMPROVEMENT OF INSTRUCTION IN ELEMENTARY EDUCATION (3). An investigation and analysis of common problems in teaching. Emphasis on the principles which apply at all levels of instruction.

CIEE 502. INDIVIDUALIZING LEARNING IN THE ELEMENTARY SCHOOL (3). Philosophy, models, and procedures for diagnosing and individualizing learning in the elementary school.

CIEE 504. TEACHING STRATEGIES FOR EXPERIENTIAL LEARNING (3). Existing and emerging theory and practice relating to experiential education. Focus on direct, active involvement of learners in developing their educational environment and outcomes.

CIEE 525. TEACHING FOR CAREER DEVELOPMENT IN THE ELEMENTARY SCHOOL (3). Planning, implementing and evaluating career development programs in the elementary school. Refocusing curricular areas to meet career development objectives.

CIEE 530. TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3). Emphasis on principles of instruction and curriculum development in the social studies; the examination and evaluation of issues in the teaching of social studies.

CIEE 531. YOUNG CHILDREN'S EXPLORATION OF THE PHYSICAL WORLD (3). Focus on quantitative and science learnings of the young child.

CIEE 532. TEACHING SCIENCE IN THE ELEMENTARY SCHOOL (3). Identification and analysis of problems and issues in society, science, and education that have an influence on curriculum and instruction in the elementary school science program.

CIEE 533. DEVELOPING AN ELEMENTARY SCHOOL SCIENCE PROGRAM (3). Development of a conceptual framework and procedure for initiating and maintaining the currency of an elementary school science program; consideration of approaches from the perspective of the child, the teacher, the community and the subject area.

CIEE 534. IMPLEMENTING AN ELEMENTARY SCHOOL SCIENCE PROGRAM (3). A course designed to aid classroom teachers, unit leaders, department chairs, district supervisors and other leadership personnel in implementing, managing and revising an elementary school science program. Emphasis on converting philosophical structures into an operational program.

CIEE 535. GLOBAL PERSPECTIVES IN CITIZENSHIP EDUCATION (3). The implications of emerging global trends and problems for social education in the elementary and middle school. The creation of interdisciplinary activities and units to develop the global perspective. PRQ: CIEE 530 or consent of department.

CIEE 536. LANGUAGE ARTS RESEARCH IN ELEMENTARY EDUCATION (3). Detailed study of selected research in elementary school language arts with emphasis on principles, trends, methods, and materials. Focus on curriculum patterns and innovations. PRQ: EPSY 520 or consent of department.

CIEE 537. ACQUISITION OF SPOKEN AND WRITTEN LANGUAGE (3). Study of language development in young children (ages 0-8). Includes in-depth treatment of theories in developmental psycholinguistics. Emphasis on parallels between oral development and literacy acquisition and on consequent preschool and elementary school teaching strategies.

CIEE 538. EVALUATING CHILDREN'S LITERATURE (3). Children's books considered in relation to literary merit and their potential for meeting developmental and ethnic needs of children. Attention given to classroom application.

CIEE 539. CHILDREN'S LITERATURE IN A MULTICULTURAL SOCIETY (3). A historical and current perspective of multicultural influences in children's literature. Implications for classroom programs are considered.

CIEE 540. TEACHING LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (3). Emphasis on principles of instruction and curriculum development in the language arts.

CIEE 541. INQUIRY STRATEGIES IN ELEMENTARY SCHOOL SOCIAL STUDIES PROGRAMS (3). Adaptation to the learning styles of children of basic inquiry strategies drawn from theoretical models in the social sciences. Emphasis on the use of these strategies as methodology in the improvement of social studies learning. PRQ: CIEE 342 or consent of department.

CIEE 542. RELATED ARTS FOR THE TEACHERS OF CHILDREN (3). Designed for students who are interested in aesthetic education for children, an examination of trends, issues and aesthetic experience in the planning of learning in the fine and applied arts. May be repeated for a maximum of 6 semester hours.

CIEE 543. WRITING IN THE ELEMENTARY SCHOOL (3). Methods of developing writing skills of elementary students based on current theory and research.

CIEE 560. SEMINAR IN ELEMENTARY EDUCATION (3). A seminar on current concerns and trends in elementary education. May be repeated to a maximum of 6 semester hours.

CIEE 566. INTERNSHIP (3-9). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 12 semester hours, although typically only 3 semester hours may be applied to the program of study.
CIEE 587. TEACHING PRACTICUM IN ELEMENTARY EDUCATION (1-6). A course designed for those actively engaged in teaching who are interested in improving their teaching skills. Clinical work with the guidance of experienced professionals and consultants in teacher education. Experiences arranged to meet the needs, concerns, and interests of each individual. May be repeated to a maximum of 8 semester hours. Does not fulfill the student teaching requirement. PRQ: Consent of department.

CIEE 590. WORKSHOP IN ELEMENTARY EDUCATION (1-3). Workshop designed for teachers, supervisors, counselors, and administrators to study contemporary issues and problems of the public school. Content varies to provide the opportunity to study current problems. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

CIEE 595. SUPERVISION OF CLINICAL EXPERIENCES (1-3). Crosslisted as CISE 595X. To provide cooperating teachers, administrators, and supervisors with a better understanding of the function of clinical experiences in the professional education of teachers. Discussion of basic issues and techniques in supervising, directing, and evaluating the clinical experiences. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

CIEE 597. INDEPENDENT RESEARCH (1-3). Independent research at the master's degree level under faculty supervision. May be repeated to a maximum of 3 semester hours. PRQ: Admission to master's degree program and consent of faculty member who will direct research.

CIEE 599A. MASTERS THESIS (3-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: EPSY 520.

CIEE 599B. ED. S. THESIS OR FIELD STUDY (3-6). May be repeated to a maximum of 8 semester hours. PRQ: Consent of chair of the student's advisory committee.

CIEE 602. ANALYSIS OF INSTRUCTION IN ELEMENTARY EDUCATION (3). The use of theory in the analysis and interpretation of teaching-learning situations, as observed or recorded from preschool and elementary classrooms. Particular attention to (1) the identification and use of goals in education and (2) the application of knowledge in the areas of learning, human growth, group behavior, and curriculum.

CIEE 632. DOMAIN OF SCIENCE EDUCATION (3). A study of selected major dimensions of science education. Consideration of major problems and issues pertinent to each dimension and their association with school science programs. PRQ: Advanced graduate standing or consent of department.

CIEE 633. CHILDREN'S LITERATURE RESEARCH IN ELEMENTARY EDUCATION (3). Examination of selected research in children's literature and implications for instruction and curricular needs. Writing and publishing for children is emphasized. PRQ: Consent of department.

CIEE 637. APPLIED LINGUISTICS IN ELEMENTARY EDUCATION (3). The application of linguistic principles to the teaching of language arts in the elementary school. PRQ: Consent of department.

CIEE 660. ADVANCED SEMINAR IN ELEMENTARY EDUCATION (3). A. Language Arts B. Science C. Social Studies D. Urban Education E. General Identification and analysis of problems and current issues in elementary education. May be repeated to a maximum of 9 semester hours.

CIEE 661. PRACTICUM IN ELEMENTARY EDUCATION (3-12). A practicum in elementary education for those actively engaged in field work, clinical work and role modeling under the guidance of the staff. The examination of practice for the purpose of improvement. May be repeated to a maximum of 12 semester hours.

CIEE 675. ELEMENTARY TEACHER EDUCATION (3). A survey of selected undergraduate programs of preparation which have been designed to educate teachers for the public elementary schools. Intensive analysis of the program at NIU involving supervised laboratory experiences. Internship concurrent with this course recommended. PRQ: Consent of department.

CIEE 686. INTERNSHIP (1-12). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 12 semester hours. PRQ: Admission to doctoral program, or consent of department.

CIEE 695. SEMINAR IN THE SUPERVISION AND ADMINISTRATION OF CLINICAL EXPERIENCES (1-3). Crosslisted as CISE 695X. An advanced seminar dealing with the theory and practice of clinical experiences in professional education such as microteaching, observation, participation, simulation, student teaching and internships. May be repeated to a maximum of 5 semester hours. PRQ: CIEE 595 or consent of department.

CIEE 697. INDEPENDENT RESEARCH (1-3). Independent research at post-master's degree levels under faculty supervision. May be repeated to a maximum of 6 semester hours.

CIEE 699. DOCTORAL RESEARCH AND DISSERTATION (1-15). Student must accumulate 15 semester hours prior to graduation. May be repeated. PRQ: Candidacy for the doctoral degree and consent of chair of doctoral committee.

Outdoor Teacher Education (CIOE)

CIOE 500. PRINCIPLES AND CONCEPTS OF OUTDOOR EDUCATION (3). Basic concepts and the history of the outdoor education movement. Scope of contemporary programs in the U.S. and abroad. Examination of the teaching-learning processes relevant to outdoor education.

CIOE 503. INTRODUCTION TO EDUCATIONAL RESEARCH IN OUTDOOR EDUCATION (3). Basic course in educational research with emphasis on outdoor education. PRQ: CIOE 500 or consent of department.

CIOE 511. ADVANCED FIELD EXPERIENCES IN OUTDOOR TEACHER EDUCATION (3). For experienced teachers who wish to supplement and enrich their classroom teaching by including outdoor learning experiences. Ways and means of relating various outdoor learning activities to the various subject matters of the school curriculum. PRQ: CIOE 500 or consent of department.

CIOE 517. NATURE, ART, AND CRAFTS IN OUTDOOR EDUCATION (3). Using nature as inspiration and as a source of ideas and materials for artistic expression in outdoor programming. Integrating nature-focused craft projects in outdoor education.

CIOE 519. LEISURE AND THE OUTDOORS (3). Theories of leisure and recreation as applied to outdoor recreation and adventure activities. Emphasis on leadership technique, appropriate use of the environment, assessment, and personal skill acquisition.

CIOE 520. ENVIRONMENTAL QUALITY EDUCATION (3). Cultural, ecological, and educational implications of the environmental movement. Emphasis on factors and influences leading to environmental quality literacy.

CIOE 521. OUTDOOR INTERPRETATION (3). Interpreting the environment in relationship to natural, historical, and cultural heritage. Emphasis on exploring aesthetic awarenesses and a land ethic.

CIOE 524. TEACHING ENVIRONMENTAL ETHICS (3). Designed for teachers and youth leaders to provide knowledge, attitudes, and skills for teaching environmental ethics. Course content applicable in both indoor and outdoor settings including schools, camps, nature centers, and other related institutions.

CIOE 525. TEACHING PHYSICAL SCIENCE IN THE OUTDOORS (3). Study of selected aspects of the physical sciences as related to the outdoor environment. Emphasis on teaching and use of research techniques of scientific investigation. PRQ: One course in mathematics and one in natural science or consent of department.

CIOE 526. TEACHING NATURAL SCIENCE IN THE OUTDOORS (3). Developing and implementing strategies for teaching natural science in the outdoors. Emphasis on teaching the interrelationships among living organisms in their natural habitats.

CIOE 534. INTEGRATING COMMUNITY RESOURCES INTO CURRICULUM AND INSTRUCTION (3). Investigating natural, cultural, and/or human resources that can be effectively integrated into curriculum development.

CIOE 544. TEACHING ENERGY ALTERNATIVES AND ENERGY CONSERVATION (3). Theoretical and practical aspects of teaching basic concepts of energy alternatives and energy conservation. Learning experiences for awareness, understandings, skills, and attitudes designed for teachers and other youth leaders in schools, camps, homes, and other institutions.
CIOE 570. ORGANIZATION AND ADMINISTRATION OF OUTDOOR EDUCATION PROGRAMS (3). The initiation and administration of outdoor education experiences of varying lengths and the acquisition, development, and maintenance of outdoor education facilities. PRQ: CIOE 500 or consent of department.

CIOE 575. SEMINAR IN OUTDOOR EDUCATION (3). Identification and analysis of current problems, issues and practices in outdoor education. PRQ: Consent of department.

CIOE 586. INTERNSHIP IN OUTDOOR EDUCATION (1-12). An internship designed to provide supervised experiences in program planning and administration, outdoor instruction, supervision, and administration. May be repeated to a maximum of 12 semester hours of credit, but no more than 9 semester hours may be applied toward the M.S.Ed. degree. S/U grading. PRQ: Consent of department.

CIOE 590. WORKSHOP IN OUTDOOR EDUCATION (1-3). The investigation and application of outdoor education principles to the particular needs and interests of the workshop participant. Participation in outdoor learning experiences and analysis of instructional materials and resources. May be repeated to a maximum of 18 semester hours, but no more than 3 semester hours may be applied toward the M.S.Ed. specialization in outdoor teacher education. PRQ: Consent of department.

CIOE 592. SPECIAL TOPICS IN OUTDOOR EDUCATION (1-6). Study of special topics, announced in advance, in outdoor education. May be repeated to a maximum of 18 semester hours, but no more than 6 semester hours may be applied toward the M.S.Ed. specialization in outdoor teacher education. PRQ: Consent of department.

CIOE 597. INDEPENDENT STUDY IN OUTDOOR EDUCATION (1-3). Individual investigations in outdoor education under the supervision of graduate faculty members. May be repeated to a maximum of 18 semester hours, but no more than 3 semester hours may be applied toward the M.S.Ed. specialization in outdoor teacher education. PRQ: Consent of department.

CIOE 599. MASTER'S THESIS (1-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. S/U grading. PRQ: CIOE 503 or EPSY 520, or consent of department.

Reading (CIRE)

CIRE 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: CIRE 350 or consent of department.

CIRE 431. TECHNIQUES OF TUTORING AND LEARNING ASSISTANCE (3). Crosslisted as LEAC 431X. Methods and techniques for peer tutoring, supplemental instruction, learning assistance, or literacy tutoring. Development of tutorial resource materials. Basic assessment and remedial or developmental processes in content area tutoring, study strategies, and learning assistance. Experiences with tutorial programs, learning assistance programs, or supplemental instruction groups.

CIRE 492. SPECIAL TOPICS IN READING (1-3). Study of special topics, announced in advance, in education. May be repeated when subject varies; however, no more than 6 semester hours may be applied toward the M.S.Ed. degree in reading. PRQ: Consent of department.

CIRE 500. IMPROVEMENT OF READING IN THE ELEMENTARY SCHOOL (3). Advanced course in the teaching of developmental reading at the elementary level. Criteria for a desirable reading program and a consideration of innovative procedures in relation to the findings of research. PRQ: CIRE 350 or consent of department.

CIRE 505. TEACHING READING IN THE MIDDLE SCHOOL (3). Theories and models. Practical application and experiences for the development of teaching techniques and strategies to improve academic and reading achievement. Study strategies for middle school students. Evaluation of current approaches, programs, and adolescent literature for teaching reading in the middle school.

CIRE 510. IMPROVEMENT OF READING IN THE SECONDARY SCHOOL (3). The extension of reading skills and interests for all learners in the junior and senior high school. The role of reading in the instructional process.

CIRE 511. TEACHING READING IN THE CONTENT AREAS (3). Adaptation of materials, reading skills, and study strategies to the content areas. The role of reading personnel as learning facilitators within the school setting.

CIRE 516. EMERGING LITERACY DEVELOPMENT (3). Emphasis on children's developing literacy. Assessment techniques and organizational approaches to literacy instruction across the preschool and primary years. PRQ: CIEE 537 or consent of department.


CIRE 530. PRACTICUM IN DIAGNOSIS OF READING DIFFICULTIES (3). Case study techniques in the diagnosis of reading problems. The administration of various formal and informal tests and the interpretation of the test results. Making case studies, followed by the preparation of case reports. Written permission of department required. PRQ: CIRE 500 or CIRE 510, and CIRE 520, or consent of department.

CIRE 531. PRACTICUM IN PROBLEMS OF TEACHING READING (3). Clinical experience in applying procedures with severely disabled readers at the elementary and/or secondary level. PRQ: Consent of department. Recommended: CIRE 530.

CIRE 540. PRACTICUM IN CORRECTIVE READING IN THE ELEMENTARY SCHOOL (3). Diagnostic techniques and corrective procedures suitable for testing and teaching the less severe reading disability cases among elementary school children. Supervised laboratory practice with children in a school setting required. PRQ: Consent of department. Recommended: CIRE 530.

CIRE 550. PRACTICUM IN CORRECTIVE READING IN THE SECONDARY SCHOOL (3). Diagnostic techniques and corrective procedures suitable for testing and teaching the less severe reading disability cases among secondary school students. Supervised laboratory practice with students in a school setting required. PRQ: Consent of department. Recommended: CIRE 530.

CIRE 586. INTERNSHIP (1-12). Work individually or in small groups in a practical situation under the guidance of a staff member of the setting and a university supervisor. May be repeated to a maximum of 12 semester hours, although typically only 3 semester hours may be applied to the program of study.

CIRE 587. TEACHING PRACTICUM (1-6). For those actively engaged in teaching who are interested in improving their teaching skills. Clinical work with the guidance of experienced professionals and consultants in teacher education. Experiences arranged to meet the needs, concerns and interests of each individual. May be repeated when subject varies; however, no more than 6 semester hours may be applied toward the M.S.Ed. degree in reading. PRQ: Acceptance by the director of the workshop.

CIRE 591. READING INSTITUTE (1-3). Basic reading problems and issues at all levels of reading instruction. Guest instructors and regular staff members. May be repeated When subject varies; however, no more than 6 semester hours may be applied toward the M.S.Ed. degree in reading. PRQ: Consent of department.

CIRE 597. INDEPENDENT RESEARCH (1-3). Research at the master's level under faculty supervision. May be repeated when subject varies; however, no more than 6 hours may be applied toward the M.S.Ed. degree in reading. PRQ: Acceptance by the faculty member who will direct the research.

CIRE 599. MASTER’S THESIS (3-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

CIRE 601. SUPERVISORY PROBLEMS IN READING (3). Procedures for developing a K-12 curriculum in reading and the supervisory responsibilities of administrators and reading consultants in improving reading instruction in the schools. PRQ: Consent of department. Recommended: 12 graduate-level hours in reading, including CIRE 500 and CIRE 510.

CIRE 611. SEMINAR IN RESEARCH STUDIES IN THE FIELD OF READING (3). Designed for the advanced student who is interested in the study of research reports in education, psychology, linguistics, and other disciplines which have a bearing on the problems of teaching reading. PRQ: Consent of department. Recommended: EPSY 520 and EPSY 521; 12 graduate-level hours in reading.
CIRE 612. CORRELATES OF EFFECTIVE READING (3). The bases of methods in the teaching of reading and the reading process: word perception, reading readiness, personality and motivation variables, and other correlates. PRQ: CIRE 530 or consent of department.

CIRE 613. SEMINAR IN COMPARATIVE READING (3). A comparison of reading methods and related variables in different national and cultural groups. PRQ: CIRE 530 or consent of department.

CIRE 614. SEMINAR IN READING (1-3). Identification and analysis of issues and problems in reading at all levels. May be repeated to a maximum of 9 semester hours. PRQ: CIRE 530 or consent of department.

CIRE 618. ADULT READING INSTRUCTION (3). Emphasis on the teaching of reading to adults; strategies applicable to meet the needs of the adult learner; functional alternatives for instruction; preparation of volunteers and the role of the reading teacher with adults. PRQ: CIRE 510 or consent of department.

CIRE 619. PRINCIPLES AND METHODS OF TEACHING POSTSECONDARY READING (3). Considers sequences of advanced reading skills, instructional materials, and model programs for postsecondary reading programs. Examines research on success of postsecondary reading and ways programs are planned and students are identified, tested, and taught. PRQ: CIRE 510 or consent of department.

CIRE 686. INTERNSHIP (1-12). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 12 semester hours. PRQ: Admission to doctoral program or consent of department.

CIRE 697. INDEPENDENT RESEARCH (1-3). Independent research at post-master's degree level under faculty supervision. May be repeated to a maximum of 6 semester hours.

CIRE 699. DOCTORAL RESEARCH AND DISSERTATION (1-15). Student must accumulate 15 semester hours prior to graduation. May be repeated. PRQ: Candidacy for the doctoral degree and consent of chair of doctoral committee.

Secondary Education (CISE)

CISE 422. MIDDLE SCHOOL ORGANIZATION AND INSTRUCTION (3). The development of middle school organizations and philosophy; forms of curricula; characteristics of early adolescent students; special concerns in instructional and activity planning.

CISE 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. PRQ: Consent of department.

CISE 450. SECONDARY SCHOOL CLASSROOM MANAGEMENT (3). Applications of motivation and management principles and procedures to maintain sound working climates in secondary school classrooms. Study of system for managing materials, media, and record keeping. PRQ: Consent of department.

CISE 492. SPECIAL TOPICS IN EDUCATION (1-3). Study of special topics, announced in advance, in education. May be repeated to a maximum of 9 semester hours when subject varies.

CISE 501. MULTICULTURAL EDUCATION: METHODS AND MATERIALS (3). Designed to aid students identify content materials and devise methods for implementing multicultural education content into curriculum. The relationship between ethnicity, culture, and educational policy is one of the major emphases of the course.

CISE 523. SEMINAR IN SECONDARY EDUCATION (3). A seminar concerned with professional and classroom problems of secondary school teachers.

CISE 533. INSTRUCTIONAL THEORIES APPLIED TO PRACTICE (3). Application of instructional theories to secondary and post-secondary practice. Review of studies related to instruction and classroom management. PRQ: Consent of department.

CISE 534. IMPROVEMENT OF INSTRUCTION (3). An investigation and analysis of common problems in teaching. The principles which apply at all levels of instruction.

CISE 552. EVALUATING SECONDARY SCHOOLS (3). Focuses on the characteristics of quality and the processes of evaluating secondary schools. Attention is given to the development of reports of evaluation and models for their implementation. PRQ: CISE 534 and CISE 523, or consent of department.

CISE 586. INTERNSHIP (2-9).

A. Secondary Education

B. Community College Teaching

Work individually or in small groups in a professional setting under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 9 semester hours.

CISE 587A. FIELD-BASED TEACHING PRACTICUM (3-6). A field-based, individualized course for practicing secondary educators and teaching teams. Concentrates on practical and immediately useful instructional improvement experiences and projects under the guidance of secondary education faculty. May be repeated to a maximum of 12 semester hours. Does not fulfill student teaching requirements. PRQ: Consent of department.

CISE 587B. PRACTICUM IN MULTICULTURAL EDUCATION (1-6). Selected field experiences and instructional design projects in multicultural education for those who are interested in improving professional skills. May be repeated to a maximum of 6 semester hours. Does not satisfy student teaching requirement. PRQ: Consent of department.

CISE 587C. CLINIC-BASED TEACHING PRACTICUM (3). A campus clinic-based practicum for secondary educators to develop master teaching skills. May be repeated to a maximum of 6 semester hours. Does not fulfill the student teaching requirement. PRQ: CISE 534 or consent of department.

CISE 588. ANALYSIS OF INSTRUCTION IN SECONDARY EDUCATION (3). Study of models and methods for the analysis and improvement of secondary level instructional procedures. PRQ: CISE 534 or consent of department.

CISE 590. WORKSHOP IN SECONDARY EDUCATION (1-3). Workshop designed for teachers, supervisors, counselors, and administrators to study contemporary issues and problems of the public school. Content varies to provide the opportunity to study current problems. May be repeated to a maximum of 12 semester hours. PRQ: Acceptance by the director of the workshop.

CISE 595X. SUPERVISION OF CLINICAL EXPERIENCES (1-3). CISE 595. To provide cooperating teachers, administrators, and supervisors with a better understanding of the function of clinical experiences in the professional education of teachers. Discussion of the basic issues and techniques in supervising, directing and evaluating those clinical experiences. May be repeated to a maximum of 5 semester hours. PRQ: Consent of department.

CISE 597. INDEPENDENT RESEARCH IN SECONDARY EDUCATION (1-3). Independent research at the master's degree level under faculty supervision. May be repeated to a maximum of 3 semester hours. PRQ: Admission to master's degree program and consent of faculty member who will direct research.

CISE 599A. MASTER'S THESIS (1-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: EPSY 520.

CISE 599B. ED.S. THESIS OR FIELD STUDY (1-6). May be repeated to a maximum of 6 semester hours. PRQ: Consent of the chair of the student's advisory committee.

CISE 623. SEMINAR: ISSUES IN SECONDARY EDUCATION (3). Integration and synthesis of the concepts, principles, and theoretical constructs in the secondary education field, including post-secondary teachers and teacher educators.

CISE 634. DESIGN OF INSTRUCTIONAL MODELS (3). The design and testing of innovative instructional methods and models. The primary intent is to participate in advancing knowledge in the field. PRQ: CISE 534 or consent of department.

CISE 662. SEMINAR: REVIEW OF RESEARCH IN SECONDARY EDUCATION (3). A review of current research in secondary education. Participants become familiar with research questions under investigation; the nature, extent, and application of findings; and some research tasks which require conceptualization and development. Possible contributions to research literature may be generated by seminar activities.
CISE 672. DOCTORAL COLLOQUIUM IN SECONDARY EDUCATION (3). Colloquium on special topics in secondary education. May be repeated to a maximum of 12 semester hours. PRQ: Admission to candidacy for the Ed.D. or consent of department.

CISE 686. INTERNSHIP (3-12).
A. Secondary In-Service Staff Development
B. Secondary Teacher Education
Work individually or in small groups in a professional setting under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 12 semester hours. PRQ: Admission to doctoral program, or consent of department.

CISE 695X. SEMINAR IN THE SUPERVISION AND ADMINISTRATION OF CLINICAL EXPERIENCES (1-3). CIEE 695. An advanced seminar dealing with the theory and practice of clinical experiences in professional education such as microteaching, observation, participation, simulation, student teaching, and internships. May be repeated to a maximum of 5 semester hours. PRQ: CISE 595X or consent of department.

CISE 697. INDEPENDENT RESEARCH IN SECONDARY EDUCATION (1-3). Independent research at post-master's degree levels under faculty supervision. May be repeated to a maximum of 6 semester hours.

CISE 699. DOCTORAL RESEARCH AND DISSERTATION (1-15). May be repeated. Student must accumulate 15 semester hours prior to graduation. PRQ: Candidacy for the doctoral degree and consent of chair of doctoral committee.
Department of Educational Psychology, Counseling, and Special Education (EP--)

Chair: Raymond J. Dembinski

Graduate Faculty

Andrew R. Brulle, professor, Ed.D., Northern Illinois University
William D. Bursuck, professor, Ph.D., University of Illinois
Lynette K. Chandler, assistant professor, Ph.D., University of Kansas
Karen B. Cole, assistant professor, Ed.D., Northern Illinois University
Corenna C. Cummings, associate professor, Ph.D., University of Pittsburgh
Jerome V. D'Agostino, assistant professor, Ph.D., University of Chicago
Denise H. Daniels, assistant professor, Ph.D., University of California, Los Angeles
Diane E. Deltz, associate professor, Ed.D., Northern Illinois University
Raymond J. Dembinski, professor, Ed.D., Indiana University
Shirley V. Dickson, assistant professor, Ph.D., University of Oregon
Michael H. Epstein, professor, Ed.D., University of Virginia
Sharon M. Freagon, professor, Ph.D., University of Wisconsin
Francesca Giordano, associate professor, Ph.D., University of Virginia
Kirk Hallowell, assistant professor, Ph.D., University of Iowa
Antoinette Heinze, associate professor, Ed.D., University of Southern Mississippi
Kathy Hotelling, adjunct assistant professor, Ph.D., University of Missouri
Gaylen G. Kapperman, professor, Ed.D., University of Northern Colorado
Diane Kinder, associate professor, Ph.D., University of Oregon
Elliott Lessen, professor, Presidential Teaching Professor, Ph.D., University of Pittsburgh
Yona Leyser, professor, Ph.D., Indiana University
Richard G. Lomax, associate professor, Ph.D., University of Pittsburgh
Carole W. Minor, professor, Ph.D., University of Maryland
Rick A. Myer, associate professor, Ph.D., Memphis State University
Allen J. Ottens, associate professor, Ph.D., University of Illinois
Sarah Peterson, associate professor, Ph.D., Arizona State University
Jean W. Pierce, professor, Ph.D., Northwestern University
Alan C. Repp, professor, Distinguished Research Professor, Ph.D., University of Florida
Thompson B. Roberts, professor, Ph.D., Stanford University
Gary D. Shank, associate professor, Ph.D., Indiana University
Janet K. Sheehan, assistant professor, Ph.D., Southern Illinois University
Lee B. Shumow, assistant professor, Ph.D., University of Wisconsin
M. Ceci Smith, associate professor, Ph.D., University of Wisconsin
L. Ruth Struyk, associate professor, Ed.D., Utah State University
Harvey N. Switzky, professor, Ph.D., Brown University
Toni R. Tollerud, assistant professor, Ph.D., University of Iowa
Susan A. Vogel, professor, Ph.D., Northwestern University

The Department of Educational Psychology, Counseling, and Special Education offers the degree Master of Science in Education and the degree Doctor of Education. A handbook, Graduate Programs in Education, and a list of requirements for each major are available in the departmental office.

Master of Science in Education

Educational psychology
Counseling
Special education

Doctor of Education

Educational psychology
Counseling

Students interested in doctoral level studies in special education may elect a cognate in special education while pursuing the doctorate in educational psychology.

Master of Science in Education in Educational Psychology

The focus of the M.S.Ed. program in educational psychology is on the major skills, principles, and research findings in significant areas of psychology as applied to the study of teaching and learning. The advanced courses offered are in the areas of human learning, human development, educational applications of microcomputers, educational research, and evaluation as they relate to the teaching-learning process in an educational setting. Specifically, perspectives, theories, and techniques essential for effective application to classroom practice and analysis of human behavior in educational psychology will be emphasized.

Admission

Students applying for graduate studies at the master's degree level in educational psychology must be accepted into the Graduate School. From among the applicants satisfying the requirements for admission to the Graduate School, the faculty of educational psychology in the Department of Educational Psychology, Counseling, and Special Education select those most qualified, utilizing the verbal and quantitative scores on the General Test of the GRE and ordinarily requiring a GPA of 2.60 or higher for the last two years of undergraduate work. Each prospective student must have three letters of recommendation from employers, supervisors, or professors.

Final decisions regarding admissions are made by the admissions committee of the department on the basis of a total profile of an individual's qualifications. Those applicants who fail to meet these admission criteria may request special consideration from the admissions committee. If the student then fails to achieve admission, an appeal may be made to the Admission, Retention, and Professional Standards Committee of the Department of Educational Psychology, Counseling, and Special Education.

Student-at-Large and Transfer Credit

Student-at-large and transfer hours in combination may not exceed 15 semester hours for students pursuing the M.S.Ed. degree in educational psychology.
RetentionPolicy

Students are responsible for meeting the professional standards of the College of Education.

Advisement

A student is assigned an adviser when admitted to the program. The adviser is a faculty member in the area of interest which the student intends to pursue. Courses of study are developed for each student.

Requirements

The M.S.Ed. in educational psychology requires a minimum of 33 semester hours and includes either a thesis or an independent research project.

EPSY 501, Psychological Foundations of Education (3)
EPSY 506, Theories and Research in Child Behavior and Development (3), OR EPSY 508, Theories and Research in Adolescent Behavior and Development (3), OR EPSY 510, Psychoeducational Development in Adulthood (3)
EPSY 520, Introduction to Educational Research (3)
EPSY 521, Educational Statistics I (3)
EPSY 530, Test Construction and Evaluation (3), OR EPSY 533, Standardized Testing (3)
One of the following (3)
LEFE 500, Social Foundations of Education (3)
LEFE 510, Philosophical Foundations of Education (3)
LEFE 520, Historical Foundations of Education (3)
LEFE 521, Historical Foundations of American Education (3)
Courses selected in consultation with the student's major adviser
EPSY 599A, Master's Thesis (6), OR EPSY 599B, Master's Project (6)

Master of Science in Education in Counseling

The M.S.Ed. in counseling is a nationally accredited (CACREP) 48-semester-hour program that provides preparation in the theory, techniques, and information needed by the professional counselor. The academic requirements as set forth by the Illinois State Board of Education and the National Board for Certified Counselors are fully met by graduates of this program. Through individualized planning, a program may be designed to focus on one of the following areas of professional counselor preparation: school counseling, counseling in community and other agency settings, and student development in higher education (counseling).

Admission

An applicant must demonstrate satisfactory academic and professional progress as indicated by data included in the application for admission to the Graduate School.

Applicants to the program in counseling must attend a pre-admission workshop and be selected by the faculty on the basis of aptitude, ability, and personal qualifications requisite for the field. Prior to the pre-admission workshop, applicants must complete the supplementary data forms and take the required tests. Applicants are to obtain the forms from the counseling office, Graham Hall 223, 753-1461. Applications and the other required material must be received by April 1 for summer and fall admissions and by November 1 for spring admission. Applicants are usually notified of an admission decision within three weeks of the pre-admission workshop.

Prospective students who fail to satisfy either the Graduate School's GPA requirement or the GRE criterion may request special consideration of their applications. Such a request must be in writing, must include compensatory evidence related to the deficiencies, and should accompany the application for admission to the Graduate School.

Any applicant who is denied admission to the program may submit to the admissions committee a written request for reconsideration that includes information not previously submitted. Final decisions of program admissions committees may be appealed to the department's Committee on Admissions, Retention, and Professional Standards. Appeals to this committee must be in writing and must explain the basis for the appeal.

Student-at-Large and Transfer Credit

Student-at-large and transfer hours in combination may not exceed 9 semester hours for students pursuing the M.S.Ed. degree in counseling.

Retention

Students are responsible for meeting the professional standards of the College of Education and undergo periodic evaluation by the counseling faculty.

Advisement

A student is assigned an adviser when admitted to the program. The adviser is a faculty member in the area of interest which the student intends to pursue. Courses of study are developed for each student. It is always the responsibility of the student to be aware of university policies and regulations affecting his or her program. Students should, therefore, familiarize themselves with the Graduate Catalog early in the program.

Certification in School Counseling

Candidates who hold a master's degree in an area other than counseling and who seek State of Illinois certification (Type 73) as a school counselor must be accepted in and satisfy requirements for the 48-hour M.S.Ed. program. Included in this program is an internship experience that must be satisfactorily completed at a school site under approved supervision. Candidates must also hold or be eligible for a standard teaching certificate. Candidates who fulfill these program requirements are eligible to receive faculty recommendation for State of Illinois school guidance and counseling certification.

Requirements

Students are required to take 39 semester hours in common requirements and 9 semester hours in an area of professional preparation.

EPCO 500, Orientation to the Counseling Profession (3)
EPCO 511, Career Counseling (3)
EPCO 525, Counseling Skills and Strategies (3)
EPCO 530, Counseling Theories and Practices (3)
EPCO 533X, Standardized Testing (3)
EPCO 540, Group Counseling Theories and Procedures (3)
EPCO 550, Practicum in Counseling (3)
EPCO 551, Supervised Practice in Group Counseling (3)
EPCO 586, Internship in Counseling (6)
EPSY 501, Psychological Foundations of Education (3)
EPSY 520, Introduction to Educational Research (3)
LEFE 500, Social Foundations of Education (3)
Areas of Professional Preparation (9)

Community Counseling
EPCO 524, Community Agency Counseling: Programs, Issues, and Practices (3)
EPCO 501, Mental Health (3),
OR EPCO 569X, Alternatives in the Counseling and Placement of Adults (3)
One of the following with advisor’s approval (3)
EPCO 521, Counseling with Children (3)
EPCO 561X, Human Resource Development (3)
EPCO 567, Drug Dependency Counseling (3)
EPCO 590, Workshop in Counseling (3)
EPCO 660, Consultation in Human Services (3)
EPCO 665, Multicultural Counseling (3)
EPCO 684X, Theoretical Foundations of Family Therapy (3)

School Counseling
EPCO 501, Mental Health (3)
EPCO 523, Secondary School Counseling: Programs, Issues, and Practices (3)
EPCO 570T, Consultation and Management in Developmental School Counseling Programs (3)

Student Affairs Practice in Higher Education/College Counseling
EPCO 522, Student Development in Higher Education: Programs, Issues, and Practices (3)
EPCO 602, Student Development in Higher Education: Theory and Practice (3)

One of the following (3)
EPCO 509, Culture of the College Student (3)
EPCO 569X, Alternatives in the Counseling and Placement of Adults (3)
EPCO 665, Multicultural Counseling (3)

Thesis Option
In addition to the requirements above, a thesis is required.

Non-Thesis Option
Students fulfill the requirements above. No thesis is required.

Master of Science in Education

In Special Education

Specialization in Behavior Disorders
Specialization in Blind Rehabilitation
Specialization in Early Childhood Special Education
Specialization in Learning Disabilities
Specialization in Multiply Handicapped, Deaf or Vision
Specialization in Visual Impairments

The M.S.Ed. in special education is designed to serve the needs of both experienced and beginning special education teachers who have baccalaureate degrees or are seeking career changes at the master’s level. In addition to an on-campus program, the department offers off-campus master’s degree programs, information on which can be obtained from the department.

For students who already hold special education certification, the faculty of special education offers individualized programs of study. Advanced course offerings for these programs are in such areas as consultation, assessment, and supervision. The supervision course offerings lead to a supervisory endorsement on the student’s Type 10 certificate. Interested students should contact the chair of the appropriate faculty for further information.

Admission

From among the applicants satisfying the requirements for admission to the Graduate School, the faculty of special education in the Department of Educational Psychology, Counseling, and Special Education select those most qualified, utilizing the verbal and quantitative scores on the General Test of the GRE and ordinarily requiring a GPA of 2.80 or higher for the last two years of undergraduate work.

Students who are not already certified as teachers must satisfactorily complete the PPST/Praxis I or the ICTS Basic Skills Test within the first 9 hours used in their approved programs. Students may take the PPST/PRAXIS I or the ICTS Basic Skills Test prior to taking courses or as students-at-large. Students must fulfill this requirement prior to participating in any practicum experience. Students who enter the program with 9 transfer and/or student-at-large hours must satisfactorily complete the PPST/PRAXIS I or the ICTS Basic Skills Test within their first semester of approved NIU course work.

Each prospective student must have three letters of recommendation from employers, supervisors, or professors.

Final decisions regarding admissions are made by the admissions committee of the department on the basis of a total profile of an individual’s qualifications. Applicants who fail to meet these admission criteria may request special consideration from the admissions committee. If the student then fails to achieve admission, an appeal may be made to the Admission, Retention, and Professional Standards Committee of the Department of Educational Psychology, Counseling, and Special Education.

Student-at-Large and Transfer Credit

Student-at-large and transfer hours in combination may not exceed 9 semester hours for students pursuing the M.S.Ed. degree in special education. Students pursuing an M.S.Ed. in special education who are part of a designated international cohort may apply no more than 15 semester hours of student-at-large and transfer credit in combination to the master’s degree.

Deficiency Study/Field Work

In cases in which students’ backgrounds in their chosen specialty are limited, they may be required to fulfill deficiency requirements established by the department. Deficiency course hours are not counted toward the minimum 36 semester hours of the master’s degree program.

Supervised clinical experiences are required in all areas of special education. Students not seeking certification may not be required to engage in clinical experiences, depending on the area of specialization in which they are enrolled.

Internship Programs

The Department of Educational Psychology, Counseling, and Special Education currently utilizes internship programs in some areas of special education. All internship placements are arranged and supervised by the department. For further information and internship possibilities see course descriptions.

Retention

To be retained in the program, a student must demonstrate acquisition of specific information competencies and application of competencies, through practical experiences, that are requisite in the specialization in which the student is enrolled.

Students must have a B or better in assessment, instructional systems, and behavior modification courses in order to take the comprehensive examination and/or enroll in the graduate practicum. Students receiving lower than a B in any of these courses must retake the course. In concert with the university policy, students may retake a course only once. If this standard is not achieved, the student may be dropped from the program.

*Crisis intervention or family counseling.
All other rules regarding academic regulations follow those described by the Graduate School with the exception that it is the policy of the faculty of special education that any grade of I which is not removed within the following semester or summer session, whether or not the student is enrolled, will be recorded as F and will be counted in the computation of the GPA.

Advisement

A student is assigned an adviser when admitted to the program. The adviser is a faculty member in special education. Courses of study are developed for each student. Students are required to take the comprehensive examination. It is always the responsibility of the student to be aware of university policies and regulations affecting his or her program. Students should, therefore, familiarize themselves with the Graduate Catalog early in the program.

Requirements

Each student must select a specialization. All specializations require a minimum of 36 semester hours of study.

For a student whose undergraduate major was in special education, course work in other appropriate fields may be substituted for a portion of the special education course work, with the approval of the student's adviser. However, in all cases, at least 50 percent of the credit hours required for the degree must be in special education. For students whose undergraduate major was not in special education or who have limited background in their chosen specialization, deficiency requirements may be established by the department. Deficiency course hours will not be counted toward the minimum 36 semester hours of the master's degree program.

Thesis Option

EPSY 520, Introduction to Educational Research (3)
EPSY 599, Master's Thesis (3-6)
Courses in specialization approved by adviser (21-24)
Electives approved by adviser (6-9)

Non-thesis Option

Same basic requirements as the thesis option except that EPSY 599 is not required. Instead, 6 semester hours in special education courses are selected with approval of the adviser.

Specialization in Behavior Disorders

This specialization prepares students to obtain teacher certification to teach individuals with behavior disorders/social emotional disabilities.

EPSPE 514, Instructional Systems for Secondary Students with High-Incidence Disabilities (3), OR EPSPE 558, Vocational Programming for Students with Disabilities (3)
EPSPE 534, Educational Diagnostics for Exceptional Learners (3)
EPSPE 540, Foundations of Special Education (3) (Not required for students who have an Illinois Type 10 Special Education Teaching Certificate)
EPSPE 546, Characteristics of Students with Behavior Disorders (3)
EPSPE 557, Modifying the Behavior of Students with Disabilities (3)
EPSPE 563, Instructional Systems for Students with Behavior Disorders (3)
EPSPE 565, Collaboration and Consultation Skills for School Professionals (3)
EPSPE 587I, Elementary or Secondary Practicum in Behavior Disorders (6) (Not required for students who have an Illinois Type 10 Special Education Teaching Certificate)

Additional course work with adviser's approval (9-18)

Specialization in Blind Rehabilitation

This specialization prepares students to instruct individuals with visual impairments and to obtain national certification from the Association of the Education and Rehabilitation of the Blind and Visually Impaired as rehabilitation teachers and/or orientation and mobility instructors.

EPSPE 451, Anatomy, Pathology, and Functioning of the Eye (3)
EPSPE 470, Literary Braille (3)
EPSPE 474, Basic Orientation and Mobility for Teachers of Persons with Visual Impairments (3)
EPSPE 475, Teaching Activities of Daily Living to Persons with Visual Impairments (3)
EPSPE 573, Instructional Systems for Utilization of Low Vision (3)
EPSPE 574, Advanced Orientation and Mobility (6), OR EPSPE 472, Communication Systems Used by Persons with Visual Impairments (3), and FCNS 540, Home Economics for Teachers of the Visually Handicapped (3)
EPSPE 586A, Internship in Orientation and Mobility Instruction of Persons with Visual Impairments (9), OR EPSPE 586B, Internship in Rehabilitation Teaching of Persons with Visual Impairments (9)
EPSPE 587Q, Practicum in Rehabilitation Teaching of the Blind (3), OR EPSPE 587U, Practicum in Orientation and Mobility Techniques for Visually Impaired, Multiply Handicapped Individuals (3)

Additional course work with adviser's approval (3)

Specialization in Early Childhood Special Education

This specialization prepares students to obtain early childhood special education approval to teach young children with special needs in preschool programs. Students must hold or obtain Illinois Type 10 Special Education Teaching Certification in order to apply for early childhood special education approval. This specialization also prepares students to obtain an early intervention credential to work with infants and toddlers with special needs.

EPSPE 423, Assessment of Infants and Preschoolers with Disabilities (3)
EPSPE 424, Instructional Systems for the Education of Infants and Preschoolers with Disabilities (3)
EPSPE 426, Interactions of Parents and Young Children with Disabilities (3)
EPSPE 427, Issues in Early Childhood Special Education (3)
EPSPE 540, Foundations of Special Education (3) (Not required for students who have an Illinois Type 10 Special Education Teaching Certificate)
EPSPE 587N, Practicum in Early Childhood Special Education (3)

Additional course work to complete the master's degree and obtain early childhood special education approval or early intervention credential selected with adviser's approval (18-21)

Specialization in Learning Disabilities

This specialization prepares students to obtain teacher certification to teach individuals with specific learning disabilities.

EPSPE 514, Instructional Systems for Secondary Students with High-Incidence Disabilities (3), OR EPSPE 558, Vocational Programming for Students with Disabilities (3)
EPSPE 534, Educational Diagnostics for Exceptional Learners (3)
EPSPE 540, Foundations of Special Education (3) (Not required for students who have an Illinois Type 10 Special Education Teaching Certificate)
EPSPE 545, Characteristics of Students with Learning Disabilities (3)
EPSPE 557, Modifying the Behavior of Students with Disabilities (3)
EPSPE 562, Instructional Systems for Students with Learning Disabilities (3)
EPSPE 565, Collaboration and Consultation Skills for School Professionals (3)
Additional course work to complete a master's degree in special education selected with adviser's approval (9-18)

Specialization in Multiply Handicapped, Deaf or Vision Impaired

This specialization prepares students to work with individuals who have multiple disabilities and who are either deaf or visually impaired. Students should have teacher certification in visual impairment or deaf and hard of hearing or will need to acquire it by completing additional course work.

EPSE 587A, Elementary or Secondary Practicum in Learning Disabilities (6) (Not required for students who have an Illinois Type 10 Special Education Teaching Certificate)

Additional course work with adviser's approval (9-18)

Specialization in Visual Impairments

This specialization prepares students to obtain certification to teach individuals who are classified as visually impaired.

EPSE 470, Literary Braille (3)
EPSE 471, Advanced Braille (3)
EPSE 472, Communication Systems Used by Persons with Visual Impairments (3)
EPSE 473, Instructional Systems for Teaching Students who are Visually Impaired (3)
EPSE 474, Basic Orientation and Mobility for Teachers of Persons with Visual Impairments (3)
EPSE 475, Teaching Activities of Daily Living to Persons with Visual Impairments (3)
EPSE 573, Instructional Systems for Utilization of Low Vision (3)
EPSE 588, Problems in the Education of the Hearing Impaired/Multiply Handicapped (3)

Additional course work with adviser's approval (6-15)

Certification at the Master's Level

A graduate student must plan a program of study with an assigned departmental adviser. A minimum of 36 semester hours of graduate credit is required for most degree programs. For an entitlement (certification) program the student must hold a standard teaching certificate or must have completed all requirements for it based on state evaluation of transcripts.

Provisions are made to assist noncertified persons who hold baccalaureate degrees in fields other than special education to acquire certification and an M.S.Ed. in special education. In some cases more than 36 semester hours will be necessary to meet the requirements for both certification and the master's degree.

Doctor of Education in Educational Psychology

The program leading to the doctoral degree with a major in educational psychology is designed to enable students to acquire a functional understanding of inquiry processes and psychological constructs which underlie learning and instruction at all age levels. In particular, the program has been planned to provide students with opportunities to do original and creative thinking in the areas of human development and learning or research and evaluation. The program enables students to relate this knowledge to other areas of interest by pursuing cognate courses outside of educational psychology. Cognate courses typically come from, but are not limited to, special education, instructional technology, or curriculum and instruction. The degree program is appropriate not only for practitioners in education, but also for those in a variety of other fields in which they need expertise in human learning, development, and research.

Admission

Applicants for the doctoral degree in educational psychology are expected to have a broad base of general education in the humanities, sciences, and social sciences. Where deficiencies are found by the advisory committee, additional courses for the doctoral degree may be prescribed.

An applicant for admission must have

- a recommended minimum GPA of 3.50 for the master's degree, based on a 4.00 grading system
- at least three favorable personal recommendations from knowledgeable professors, employers, or supervisors
- data providing evidence of appropriate personal and professional development. (Students intending to take a cognate in special education should have a minimum of two years of professional experience centered in the education of individuals with disabilities.)
- a satisfactory undergraduate transcript
- examples of the applicant's professional writing or evidence of writing ability as required by the admissions committee.

Before applying for admission to the doctoral program in educational psychology, the student should consult the faculty chair in that area, who will serve as an interim adviser until the applicant has been admitted to Graduate School. Students seeking to take courses while admission papers to the Graduate School are being processed should receive approval of the faculty chair.

After all admission forms are completed and Graduate School requirements for admission are fulfilled, the applicant is considered by the admissions committee of the educational psychology faculty in the Department of Educational Psychology, Counseling, and Special Education. Applicants may be invited for an interview. The recommendation of the admissions committee is forwarded to the Graduate School, which informs the applicant of the admission decision. Applicants who are denied admission may petition in writing for reconsideration to the Admissions, Retention, and Professional Standards Committee of the Department of Educational Psychology, Counseling, and Special Education. Limited facilities and/or resources may necessitate the rejection of some students who meet the minimum requirements for admission.
Advisement

As soon as possible after admission the graduate student should make an appointment with the faculty chair in educational psychology who, as interim adviser, assists the student in selecting a program advisory committee. This committee consists of a chair and two other graduate faculty members who advise the student in program planning. Advisement is given as to courses in the major, cognates, deficiencies, additional courses, prerequisites, and the candidacy examination. The student's approved program is forwarded to the Graduate School for approval.

Course Requirements

The doctoral program in educational psychology requires the equivalent of at least three years of full-time academic work, or a minimum of 90 semester hours of graduate work beyond the baccalaureate degree including the following.

EPSY 601, Professional Practices in Educational Psychology (3)
EPSY 620, Educational Research Planning and Interpretation (3)
LEFE 615, Foundations of Educational Policy (3), OR LEFE 621, Seminar in American Educational Thought (3)

One of the following (3)
EPSY 605, Advanced Seminar in Child Development (3)
EPSY 608, Advanced Research Seminar in Adolescent Development (3)
EPSY 610, Advanced Seminar in Human Development (3)
EPSY 613, Advanced Educational Psychology (3)

Two of the following (6)
EPSY 522, Educational Statistics II (3)
EPSY 525, Qualitative Research in Education (3)
EPSY 531, Program Evaluation in Education (3)
EPSY 635, Theory of Measurement (3)

Additional course work to total 30 semester hours (30)
Courses in the major chosen in consultation with an adviser (12-18)
Courses in a cognate area chosen in consultation with an adviser (9-15)
EPSY 686, Internship (3)
EPSY 699, Doctoral Research and Dissertation (12)

A maximum of 30 semester hours from a master's degree may be included in the doctoral program. These hours may be applied to prerequisites, cognates, or other requirements with the consent of the program advisory committee. The combined total of student-at-large and transfer hours beyond the master's degree may not exceed 15 semester hours for students pursuing the Ed.D. degree in educational psychology.

Internship

An internship is required as a part of the doctoral program. An internship is undertaken with the consent of the faculty chair and under the direction of a graduate faculty adviser.

Examinations

The student must receive approval from the faculty chair to take the candidacy examination. It is expected that the student will have completed at least 60 semester hours of graduate course work, including most or all course work in the area of interest. The candidacy examination committee consists of the same members as the program advisory committee, unless the student in conference with the faculty chair elects otherwise.

Results of the candidacy examination are forwarded to the Graduate School. Satisfactory completion of the candidacy examination admits the student to candidacy for the doctoral degree. A student who fails the candidacy examination may be granted the opportunity to take a second examination. Failure on the second examination denies the student admission to candidacy.

A final oral examination related to the dissertation is required and is conducted in accordance with the general requirements of the Graduate School.

Candidacy

Upon satisfactory completion of the candidacy examination, the student is accepted as a candidate for the Ed.D. degree. The doctoral candidate must complete the course work and the dissertation, take the final examination over the dissertation, and meet all other requirements of the Department of Educational Psychology, Counseling, and Special Education and the Graduate School before the degree may be awarded. Once admitted to candidacy the student must continue registration in the dissertation course (EPSY 699) until all requirements for the degree are completed. The candidate must make application to the Graduate School for graduation early in the semester in which the student expects to graduate. (See also the general Graduate School statement on candidacy requirements.)

Dissertation

The dissertation in educational psychology is expected to make a substantial contribution to knowledge in the field. Candidates are expected to conduct original scholarship and independent research appropriate to their major and communicate the results of their research effectively. The dissertation director and committee are selected by the student in consultation with the faculty chair. The committee represents graduate faculty of the university with knowledge in the area of the candidate's topic. At least two members of the committee are selected from the graduate faculty in educational psychology and at least one member from the graduate faculty outside the educational psychology faculty. The names of the dissertation director and committee members are forwarded to the Graduate School for approval. Official approval of a dissertation director must be effected by the conclusion of the first semester in which the student registers for dissertation credit. (See also Graduate School dissertation requirements.)

Doctor of Education in Counseling

The doctoral program in counseling offers advanced professional preparation for those intending to become university professors of counseling and advanced level clinical counselors and/or supervisors. This program is nationally accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP).

Admission

An applicant for admission must have a master's degree in counseling or the equivalent. A GPA of at least 3.20 in previous graduate work; 3.50 or higher preferred. GRE General Test scores with a minimum of 500 verbal and 500 quantitative preferred.

three letters of recommendation from individuals holding a doctoral degree which provide supportive evidence of an applicant's academic and professional qualifications. All letters must be dated no more than one year prior to the application deadline.

satisfactory academic and professional progress as indicated by data included in the application for admission to the Graduate School.
a minimum of one year of work experience as a counselor preferred.

demonstration of writing competencies as prescribed by the department and submission of a scholarly paper or professional report of which the applicant is sole author.
evidence of potential for professional leadership.

following screening based on the above criteria, a pre-admission interview.

Prospective students who fail to satisfy either the GPA or the GRE criterion may request special consideration of their applications. Such a request must be in writing, must include compensatory evidence related to the deficiencies, and should accompany the application for admission to the Graduate School. Final decisions regarding admissions are made by program committees of the department on the basis of a total profile of an individual's qualifications. Where deficiencies exist, the Doctoral Admissions Committee may prescribe additional courses and recommend admission with stipulation.

Admission to the doctoral program in counseling is competitive and takes place twice a year. To be considered for admission in the summer session or fall semester, all materials must be received by April 1; to be considered for spring semester admission, all materials must be received by November 1.

Advisement

As soon as possible after admission, the graduate student should make an appointment with the interim faculty adviser in counseling, who assists the student in selecting a program advisory committee. This committee consists of a chair and two other graduate faculty members who advise the student in program planning. Advisement is given regarding courses in the major, area of study, additional courses, prerequisites, and the comprehensive examinations. The student's approved program is forwarded to the Graduate School for approval.

Course Requirements

The Ed.D. in counseling requires a minimum of 105 semester hours including a maximum of 30 semester hours from the master's degree plus a minimum of 75 additional semester hours normally distributed as follows.

EPCO 592, Special Topics in Counseling (3),
OR EPCO 595, Women and Careers (3),
OR EPCO 666, Human Sexuality Counseling (3)
EPCO 561X, Human Resource Development (3),
OR EPCO 660, Consultation in Human Services (3)
Two of the following (6)

EPsy 521, Educational Statistics I (3)
EPsy 522, Educational Statistics II (3)
EPsy 525, Qualitative Research in Education (3)
EPsy 622, Methods of Multivariate Analysis (3)
EPsy 655, Advanced Seminar in Child Development (3),
OR EPsy 608, Advanced Research Seminar in Adolescent Development (3),
EPCO 610, Advanced Seminar in Human Development (3)
EPCO 600, Professional Seminar in Counseling (3)
EPCO 630, Theories of Counseling (3)
EPCO 640, Group Leadership (3)
EPCO 650, Advanced Practicum in Individual Counseling (3)
EPCO 652, Supervision in Counseling (3)
EPCO 664, Personality Testing (3)
EPCO 665, Multicultural Counseling (3)
EPCO 666, Internship in Counseling (12)
EPCO 690, Seminar on Research in Human Services (3)
EPCO 699, Doctoral Research and Dissertation (15)
Area of study (9)

In addition, prior to approval of the dissertation proposal, the student must present evidence and/or documentation of computer technology competence, professional association involvement, submission of an article for publication, a presentation at a professional conference, and research team involvement. Details regarding this requirement are available from the student's adviser.

Internship

An internship is a required part of the doctoral program. Opportunities exist for internships in a wide variety of settings. The internship is planned in consultation with the chair of the student's program advisory committee and approved by the internship coordinator. It consists of a minimum 1200 clock hours, including one semester full-time or two semesters half-time.

Examinations

All doctoral students in counseling are required to pass two examinations prior to admission to candidacy.

The general examination includes the basic competencies in counseling theories; human development, learning and behavior; research; cultural diversity; group counseling; consultation; supervision; assessment; and professional issues, including ethics. A student may apply to the faculty chair to take this examination as soon as course work in the basic competencies is completed. This examination must be successfully completed prior to the candidacy examination.

The candidacy examination includes the student's selected area of study and, where applicable, the cognate area. A student may apply to the program advisory committee chair to take this examination on the completion of most or all of the course work in the area of study. A student has eight weeks to provide a 25-page typewritten response to student- and faculty-generated questions prior to an oral examination related to the contents of the paper.

Satisfactory completion of the candidacy examination admits the student to candidacy for the doctoral degree. A student who fails the candidacy examination may be granted the opportunity to retake it. Failure on the second attempt denies the student admission to candidacy.

A final oral examination related to the dissertation is required and is conducted in accordance with the general requirements of the Graduate School.

Dissertation

The dissertation represents a substantial contribution to knowledge in the candidate's major field of study. Candidates are expected to conduct original scholarship and independent research appropriate to their major and communicate the results of their research effectively. Each student is required to register for three credit hours of EPCO 699 each semester subsequent to passing the candidacy examination. See 'Dissertation Requirements' under 'Requirements for Doctoral Degrees.'

The student's dissertation committee is selected by the student in consultation with the faculty chair. The committee represents graduate faculty of the university with knowledge in the area of the candidate's topic. The number of committee members, including the chair, is normally three to five. At least two members of the committee must be senior members of the graduate faculty; no more than one member may be without graduate faculty status.

*Only if topic is counseling women or counseling men.
*Or other course work with the consent of the student's program committee.
*Course work selected in consultation with the student's program committee.
Course List

Counseling (EPCO)

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

EPCO 433X. AFFECTIVE EDUCATION (3). EPSY 433. Examines affective education programs and curriculum for students in grades K-12. Focuses on assisting teachers with developing communication skills and locating resources to promote students' emotional well-being.

EPCO 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.

EPCO 500. ORIENTATION TO THE COUNSELING PROFESSION (3). The profession of counseling in a variety of settings, study of current trends and practices, and a survey of developmental needs and current problems of clients within a changing society.

EPCO 501. MENTAL HEALTH (3). Study of mental health concepts, research, and the dynamics of human behavior with emphasis on the use of these data by counselors. PRQ: EPCO 500 or consent of department.

EPCO 509. CULTURE OF THE COLLEGE STUDENT (3). Concepts of culture, subculture, and societal participation with reference to college students.

EPCO 511. CAREER COUNSELING (3). Career theory and counseling techniques for those intending to be counselors in schools, agencies, colleges and universities, and organizational settings. PRQ: EPCO 500 or consent of department.

EPCO 512. ORGANIZATION AND ADMINISTRATION OF CAREER COUNSELING PROGRAMS (3). Development, organization, management, and evaluation of career counseling programs in educational, work, and community settings. Field visits and individualized projects. PRQ: EPCO 500 or consent of department.

EPCO 520. ELEMENTARY SCHOOL COUNSELING: PROGRAMS, ISSUES, AND PRACTICES (3). Principles of developmental guidance, role and function of the elementary school counselor, group guidance and case techniques, and parent and teacher consultation. PRQ: EPCO 500 or consent of department.

EPCO 521. COUNSELING WITH CHILDREN (3). Principles, assessment, and methods of counseling pertinent to working with children in schools, mental health facilities, and hospitals. PRQ: EPCO 500 or consent of department.

EPCO 522. STUDENT DEVELOPMENT IN HIGHER EDUCATION: PROGRAMS, ISSUES, AND PRACTICES (3). Focus on current programs, issues, practices, research, and trends in student development programming in higher education. Exploration of historical, philosophical, and theoretical foundations of student development related to practice.

EPCO 523. SECONDARY SCHOOL COUNSELING: PROGRAMS, ISSUES, AND PRACTICES (3). Effective secondary school counseling programming to include developmental curriculum, academic program planning, motivation, retention, consultation, and referral. Current issues and practices related to the concerns of adolescents.

EPCO 524. COMMUNITY AGENCY COUNSELING: PROGRAMS, ISSUES, AND PRACTICES (3). Principles of service delivery in community agencies including roles and functions of counselors, trends and problems, and specialized settings and populations.

EPCO 525. COUNSELING SKILLS AND STRATEGIES (3). Clinical preparation in counseling skill development. Provides an overview of the role of the counselor and the counseling process. Emphasizes practice in counseling skills and techniques. PRQ: EPCO 500 or consent of department.

EPCO 530. COUNSELING THEORIES AND PRACTICES (3). Constructs, principles, and techniques of major counseling theories. PRQ: EPCO 525 or consent of department.

EPCO 533X. STANDARDIZED TESTING (3). EPSY 533. Principles of measurement as applied to group standardized measures of achievement, special aptitude, intelligence, personality and interest for use in educational personnel work. Administering, scoring, and interpreting these measures.

EPCO 540. GROUP COUNSELING THEORIES AND PROCEDURES (3). Constructs, principles, and techniques of major group counseling theories. Group dynamics and developmental programming. Practice with selected techniques. PRQ: EPCO 500 or consent of department.

EPCO 550. PRACTICUM IN COUNSELING (1-6). The practice of counseling in laboratory and field settings. Cases, tapes, role playing, and analysis of counseling process and counselor responses. May be repeated up to a maximum of 6 semester hours. PRQ: EPCO 500, EPCO 511, EPCO 525, EPCO 530, and EPCO 533X, or consent of department.

EPCO 551. SUPERVISED PRACTICE IN GROUP COUNSELING (3). The practical aspects of group counseling and developmental programming. Leadership and participatory experiences in the formation, maintenance, development, and closing stages of groups. PRQ: EPCO 540 or consent of department. PRQ or CRQ: EPCO 550 or consent of department.

EPCO 561X. HUMAN RESOURCE DEVELOPMENT (3). LEAC 561. The nature and function of programs for developing human resources in business, education, industry, government, social services, and voluntary organizations.

EPCO 566. BIOFEEDBACK IN COUNSELING AND EDUCATION (3). Techniques and theory related to biofeedback training in counseling and education. Emphasis on voluntary self-regulation as a tool for preventive and developmental enhancement of human potential. PRQ: EPCO 550 or consent of department.

EPCO 567. DRUG DEPENDENCY COUNSELING (3). The pharmacologic and psychosocial effects of various drugs. Emphasis on counseling skills and techniques in working with problems of drug dependency and in the prevention of dependency. PRQ: EPCO 550 or consent of department.

EPCO 568. COUNSELING THE EXCEPTIONAL STUDENT (3). Alternate counseling strategies to be applied to the exceptional student. Emphasis on counseling skills and techniques in working with all behaviorally, emotionally and intellectually different persons. PRQ: EPCO 530 and EPCO 550, or consent of department.

EPCO 569X. ALTERNATIVES IN THE COUNSELING AND PLACEMENT OF ADULTS (1-3). LEAC 544. An examination and identification of promising alternatives in the facilitation of adult career development through guidance, counseling, and vocational placement. May be repeated to a maximum of 3 semester hours.

EPCO 570T. CONSULTATION AND MANAGEMENT IN DEVELOPMENTAL SCHOOL COUNSELING PROGRAMS (3). The role of the school counselor as a consultant and manager in the design, implementation, and evaluation of a comprehensive developmental school counseling program.

EPCO 572. ASSESSMENT METHODS IN HIGHER EDUCATION (3). Crosslisted as EPSY 572X. Basic concepts and procedures in the assessment of applicants for admission and retention and use of assessment methods for counseling to support retention in institutions of higher education. PRQ: EPCO 500 or consent of department.

EPCO 586. INTERNSHIP IN COUNSELING (1-15). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 15 semester hours. PRQ: EPCO 550 or consent of department.

EPCO 590. WORKSHOP IN COUNSELING (1-3). Workshop designed to study contemporary issues and problems in the provision of human services. May be repeated to a maximum of 12 semester hours when subject varies.

EPCO 592. SPECIAL TOPICS IN COUNSELING (1-3). Study of special topics, announced in advance, in counselor education. May be repeated to a maximum of 9 semester hours when subject varies.

EPCO 593. CRISIS INTERVENTION (3). Role and responsibilities of counselors in crisis intervention. Assessment and case management for crisis situations.

EPCO 595. WOMEN AND CAREERS (3). An examination of the role of women in society and the work world. Emphasis on career development and locating resources to promote women's emotional well-being.

EPCO 596. AUTONOMY AND INDEPENDENCE (1-3). Focuses on assisting teachers with developing communication skills and locating resources to promote students' emotional well-being.

EPCO 599. INDEPENDENT RESEARCH IN COUNSELING (1-3). Independent research at the master's degree level under faculty supervision. May be repeated to a maximum of 3 semester hours. PRQ: Admission to master's degree program and consent of faculty member who will direct research.
EPCO 599. MASTER’S THESIS (1-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: EPSY 520.

EPCO 600. PROFESSIONAL SEMINAR IN COUNSELING (3). Philosophical and historical roots of the counseling profession, the systems which affect its functioning, and the ethical and legal standards which guide it. Orientation to the expectations of advanced graduate study in counseling and the responsibilities of professionals in the field.

EPCO 601. PERSONNEL SERVICES IN HIGHER EDUCATION (3). A comprehensive study of the organizational structure and administrative relationships of personnel services in the collegiate setting. Student personnel services included are admission, testing, records, housing, scholarships and loans, health and counseling, student activities, discipline, student government and placement. PRQ: A master’s degree or its equivalent in guidance or a related area of personnel work, or consent of department.

EPCO 602. STUDENT DEVELOPMENT IN HIGHER EDUCATION: THEORY AND PRACTICE (3). Theories of late adolescent and adult development in relation to their usefulness and application in designing student development programs and environments that support and are interactive with academic disciplines.

EPCO 603. PUPIL PERSONNEL ADMINISTRATION (3). Attendance, health, guidance, psychological and social work services. Organization patterns and problems of budget, staffing, supervision and program evaluation. PRQ: Master’s degree or consent of department.

EPCO 610. THEORY IN CAREER DEVELOPMENT (3). A thorough grounding in current career development theories. PRQ: Master’s degree in counseling or consent of department.

EPCO 615X. STRATEGIC HUMAN RESOURCE DEVELOPMENT (3). LEAC 615. Advanced study emphasizing complex skills, concepts, and strategies relating to the adult teaching/learning component of human resource development in business, industry, government, and voluntary organizations.

EPCO 630. THEORIES OF COUNSELING (3). A critical evaluation of theories of counseling. Review of research in the application of theoretical counseling constructs. PRQ: Master’s degree in counseling or consent of department.

EPCO 631. SEMINAR IN COUNSELING AND PSYCHOTHERAPY (1-3).
A. Adlerian Counseling
B. Behavioral Counseling
C. Gestalt Therapy
D. Psychosynthesis
E. Rational-Emotive Psychotherapy
Advanced graduate seminars with concentrations on specific theories of counseling and psychotherapy. Separate sections, each focusing on a single theory. Credit is limited to a total of 3 semester hours per topic. PRQ: EPCO 630 or consent of department.

EPCO 636. TRANSPERSONAL COUNSELING THEORY (3). Theory, research, and application related to the development of consciousness enabling individuals to utilize potential in self and others. Content will address the process of becoming a transpersonal counselor.

EPCO 640. GROUP LEADERSHIP (3). Study of leadership styles in task-oriented and personal growth groups. Emphasis on the analysis and attainment of leadership behaviors that are most facilitative of individual and group purposes and goals. PRQ: EPCO 630, EPCO 540, or consent of department.

EPCO 650. ADVANCED PRACTICUM IN INDIVIDUAL COUNSELING (3). Supervised practice of counseling. Focus on the development of skills in working with individual clients. PRQ: Master’s degree in counseling or consent of department.

EPCO 651. ADVANCED PRACTICUM IN GROUP COUNSELING (3). Supervised practice of counseling. Focus on the development of skills in working with groups. PRQ: Master’s degree in counseling or consent of department.

EPCO 652. SUPERVISION IN COUNSELING (3). Theory and practical experience relating to supervision of counselors-in-training. PRQ: Master’s degree in counseling and consent of department.

EPCO 660. CONSULTATION IN HUMAN SERVICES (3). Application of consultation strategies in working with individuals and groups. PRQ: Master’s degree in counseling or consent of department.

EPCO 661. OUTREACH IN HUMAN SERVICE PROGRAMS (3). Application of outreach strategies in working with individuals and groups. PRQ: Master’s degree in counseling or consent of department.

EPCO 664. PERSONALITY TESTING (3). Application of personality assessment instruments, including projective tests, in working with individuals. PRQ: Master’s degree in counseling or consent of department.

EPCO 665. MULTICULTURAL COUNSELING (3). Alternate counseling strategies for counselors in a multicultural society. Analysis of traditional and contemporary experiences of ethnocultural and other population groups with emphasis on counseling skills and techniques in working with clients of diverse backgrounds. PRQ: EPCO 530 or consent of department.

EPCO 666. HUMAN SEXUALITY COUNSELING (3). Alternate counseling strategies to be applied to sexual concerns and problem areas. Emphasis on counseling skills and techniques in working with persons with differing sexual values, needs, and backgrounds. PRQ: Master’s degree in counseling or consent of department.

EPCO 667. COUNSELING OLDER PERSONS (3). Gerontological counseling models and techniques. PRQ: Master’s degree in counseling or consent of department.

EPCO 668. COUNSELING EXCEPTIONAL PERSONS (3). Seminar in counseling models and techniques. PRQ: Master’s degree in counseling or consent of department.

EPCO 675. ADVANCED PRACTICUM IN CONSTRUCTION NETWORKING (1-6). Supervised practice of counseling. Focus on the development of skills in working with individuals and groups. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

EPCO 684. THEORETICAL FOUNDATIONS OF FAMILY THERAPY (3). FCNS 684. An examination and discussion of the historical development and theoretical foundations of family therapy, with a focus on the traditional and current models of therapy in the field. PRQ: Consent of department.

EPCO 686. INTERNSHIP IN COUNSELING (1-15). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. Open only to doctoral students, or by consent of department. May be repeated to a maximum of 30 semester hours. PRQ: EPCO 600, EPCO 650, and 3 semester hours of required doctoral course work, or consent of department.

EPCO 690. SEMINAR ON RESEARCH IN HUMAN SERVICES (3). Seminar on research in counseling, career development, and other human services. PRQ: Master’s degree in counseling or consent of department.

EPCO 697. INDEPENDENT RESEARCH IN COUNSELING (1-3). Independent research at post-master’s degree levels under faculty supervision. May be repeated to a maximum of 6 semester hours. PRQ: Master’s degree in counseling or consent of department.

EPCO 699. DOCTORAL RESEARCH AND DISSERTATION (3-15). May be repeated. Student must accumulate 15 semester hours prior to graduation. PRQ: Candidacy for the doctoral degree and consent of chair of doctoral committee.

Special Education (EPSE)

EPSE 421. TECHNOLOGY FOR 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 (IEP).

EPSE 423. ASSESSMENT OF INFANTS AND PRESCHOOLERS WITH DISABILITIES (3). Identification and diagnosis of infants, toddlers, and young children (birth to six years) with special needs in developmental areas. PRQ: Consent of department.

EPSE 424. INSTRUCTIONAL SYSTEMS FOR THE EDUCATION OF INFANTS AND PRESCHOOLERS WITH DISABILITIES (3). Curricular models for instructional intervention for infants and preschoolers (birth to six years) with disabilities. PRQ: Consent of department.

EPSE 426. INTERACTIONS OF PARENTS AND YOUNG CHILDREN WITH DISABILITIES (3). Opportunities to develop parenting skills for fostering the growth of young children with disabilities (0-6 years of age) with emphasis on how to communicate these skills to parents and help them help the child with disabilities. PRQ: Consent of department.

EPSE 427. ISSUES IN EARLY CHILDHOOD SPECIAL EDUCATION (1-3). Trends, issues, and concerns of early intervention and early childhood special education programs. In-depth analysis of current issues in the field. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.
EPSE 441. CHARACTERISTICS OF DEVELOPMENTAL DISABILITIES (3). A survey of the classification, diagnosis, characteristics, and education of individuals with developmental disabilities. PRQ: EPSE 240 or consent of department.

EPSE 448. PROBLEMS OF INDIVIDUALS WITH PHYSICAL DISABILITIES AND HEALTH IMPAIRMENTS (3). Introduction to educational difficulties of individuals with physical disabilities and/or health/medical conditions. Approach through medical understanding of the differences in physiological adaptation of individuals with disabilities. Consideration given to planning for both students and their environment to meet their special needs. PRQ: EPSE 240 or consent of department.

EPSE 450. EDUCATION OF STUDENTS WITH VISUAL IMPAIRMENTS (3). Introduction to educational programs, services, and resources for children and adolescents with visual impairments. Exploration of historical background and sociological and psychological aspects of blindness, and of legislation, literature, and philosophy related to blindness. PRQ: Consent of department.

EPSE 451. ANATOMY, PATHOLOGY, AND FUNCTIONING OF THE EYE (3). Lectures and demonstrations of various pathologies. Includes study of parts of the eye and their function, normal visual development, abnormalities and conditions that result in visual loss, and functional and programmatic implications. PRQ: Consent of department.

EPSE 452. INTRODUCTION TO THE EDUCATION OF THE DEAF (2). An overview of education of the deaf and hard of hearing. Causes and effects of hearing loss and hearing loss as a medical condition. Role of the teacher, audiologist, and others dealing with the problems of the acoustically handicapped. PRQ: EPSE 240 or consent of department.

EPSE 457. SYSTEMS FOR INTEGRATING THE EXCEPTIONAL STUDENT IN THE REGULAR CLASSROOM (3). Designed to provide preservice and inservice elementary, secondary, and vocational educators information and skills necessary to accommodate exceptional students placed in regular school settings. This course addresses itself to the establishment and implementation of individual educational programs and other concerns encompassed under the Individuals with Disabilities Education Act of 1990 (Public Law 101-476) and the Regulations of Section 504 of the Rehabilitation Act of 1973. Does not count toward a degree program in special education. PRQ: CEE 282 or CEE 282, or consent of department.

EPSE 464. INSTRUCTIONAL SYSTEMS FOR STUDENTS WITH PHYSICAL HANDICAPS (3). The curriculum, instructional methods, and materials appropriate for teaching students with physical handicaps, including objectives, evaluation, and class organization. PRQ: EPSE 380, EPSE 448, and successful completion of the PPST/Praxis I or the ICTS Basic Skills Test, or consent of department.

EPSE 465. SIGNED ENGLISH I (3). Development of receptive and expressive skills in signed English and fingerspelling. Practice in the simultaneous use of speech and sign language or fingerspelling. Manual communication skills that are used in educational and social settings are emphasized.

EPSE 466. SIGNED ENGLISH II (3). Advanced work in the development of lexicon and receptive and expressive skills using Signed Exact English. Practice in the simultaneous transmission of content appropriate for hearing impaired students. PRQ: EPSE 465 or consent of department.

EPSE 467. COMMUNICATION AND CURRICULUM FOR PRESCHOOL STUDENTS WHO ARE DEAF OR HARD OF HEARING (3). Designed to provide techniques for the development of speech articulation, oral and/or manual language, and prereading and prewriting skills with preschool students who are deaf or hard of hearing. Emphasizes the integration of communication (including auditory training and speaking) and cognitive curriculum. PRQ: EPSE 365, EPSE 382, EPSE 447, COMD 403 or CIEE 403X, and successful completion of both the PPST/Praxis I or the ICTS Basic Skills Test and the Syntax Examination for the specialization in multiply handicapped, deaf or vision, or consent of department.

EPSE 488. COMMUNICATION AND CURRICULUM FOR ELEMENTARY STUDENTS WHO ARE DEAF OR HARD OF HEARING (3). A focus on bilingual and bimodal language development and literacy attainment for elementary students who are deaf or hard of hearing. Emphasizes the methods of teaching content subjects, speech, and auditory training. PRQ: EPSE 365, EPSE 382, EPSE 447, COMD 403 or CIEE 403X, and successful completion of the PPST/Praxis I or the ICTS Basic Skills Test and the Syntax Examination for the specialization in multiply handicapped, deaf or vision, or consent of department.

EPSE 489. COMMUNICATION AND CURRICULUM FOR SECONDARY STUDENTS WHO ARE DEAF OR HARD OF HEARING (3). Methods of assessing and teaching secondary students who are deaf or hard of hearing; incorporating the teaching of language and speech in academic subjects. PRQ: EPSE 365, EPSE 382, EPSE 447, EPSE 467, EPSE 468, EPSE 482, COMD 403 or CIEE 403X, and successful completion of the PPST/Praxis I or the ICTS Basic Skills Test, or consent of department.

EPSE 470. LITERARY BRAILLE (3). Mastery in the reading and writing of Grade II literary braille. Development and use of special materials; slate and stylus techniques presented. PRQ: Consent of department.

EPSE 471. ADVANCED BRAILLE (3). Intensive study of the Nemeth Code for mathematics and science notation, music code, computer and foreign language codes, and braille textbook formats and techniques. Transcription and adaptation of print material, including tests and worksheets, for individuals who are blind. PRQ: EPSE 470 or consent of department.

EPSE 472. COMMUNICATION SYSTEMS USED BY PERSONS WITH VISUAL IMPAIRMENTS (3). Techniques in teaching the use of communications systems developed or adapted for individuals who are blind or visually impaired. These include methods for teaching braille, typing, script, notetaking, sound reproduction systems, listening skills, electronic reading devices, and calculation with emphasis on abacus usage. Laboratory experiences included. PRQ: EPSE 470 and successful completion of the PPST/Praxis I or the ICTS Basic Skills Test, or consent of department.

EPSE 473. INSTRUCTIONAL SYSTEMS FOR TEACHING STUDENTS WHO ARE VISUALLY IMPAIRED (3). Special methods, materials, and techniques employed in the assessment and instruction of learners with visual impairments. Emphasis on utilization of low vision, curriculum planning, and adaptation of subject matter areas. PRQ: Successful completion of the PPST/Praxis I or the ICTS Basic Skills Test, or consent of department.

EPSE 474. BASIC ORIENTATION AND MOBILITY FOR TEACHERS OF PERSONS WITH VISUAL IMPAIRMENTS (3). Emphasis on concept development, sensory skills, organizational techniques, pre-cane skills, and a full range of mobility options. Exploration of historical background and current issues in orientation and mobility. Fieldwork through high school and learners with multiple disabilities included. PRQ: Successful completion of the PPST/Praxis I or the ICTS Basic Skills Test, or consent of department.

EPSE 475. TEACHING ACTIVITIES OF DAILY LIVING TO VISUALLY IMPAIRED AND MULTIPLY HANDICAPPED PERSONS (3). Methods of teaching grooming, eating, and personal and home management to visually impaired and multiply handicapped persons, youth, and adults. Two hours of lecture and two hours of laboratory per week. Home, school, work, and leisure skills emphasized.

EPSE 478. STRATEGIES FOR INTERACTING WITH PARENTS AND SCHOOL PERSONNEL (3). Preparation in recognizing the attitudes, stages of acceptance, and behavior of parents of and professionals who work with exceptional learners. Emphasis on conferencing strategies to aid teachers in effecting productive adult-adult interactions and in meeting the needs of parents of and professionals who work with exceptional learners.

EPSE 490. WORKSHOP IN SPECIAL EDUCATION (1-3). The 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.

EPSE 513. INSTRUCTIONAL SYSTEMS FOR HIGH-INCIDENCE HANDICAPPED LEARNERS—ELEMENTARY (3). Instructional theories, curricula, methods, and materials as they relate to teaching elementary-aged high-incidence handicapped learners. Emphasis on instructional procedures, adaptations, and progress-monitoring systems. PRQ: EPSE 540, EPSE 547, EPSE 534, CIRE 500, MATH 402, or consent of department.

EPSE 514. INSTRUCTIONAL SYSTEMS FOR SECONDARY STUDENTS WITH HIGH-INCIDENCE DISABILITIES (3). Instructional theories, curricula, methods, and materials as they relate to teaching secondary-aged students with high incidence disabilities. Emphasis on instructional procedures, adaptations, and progress-monitoring systems.

EPSE 534. EDUCATIONAL DIAGNOSTICS FOR EXCEPTIONAL LEARNERS (3). Diagnosis of exceptional learners. Special attention is given to the identification of exceptional learners and recommendations for special education procedures including nondiscriminatory testing. PRQ: EPSE 434 or consent of department.
EPSE 540. FOUNDATIONS OF SPECIAL EDUCATION (3). The education of exceptional learners including contemporary changes in philosophy, objectives, teaching in diverse cultural settings, curriculum, methods, materials, and evaluation.

EPSE 545. CHARACTERISTICS OF STUDENTS WITH LEARNING DISABILITIES (3). Historical foundations, research, instructional perspectives, and current issues. PRQ: EPSE 540 or consent of department.

EPSE 546. CHARACTERISTICS OF STUDENTS WITH BEHAVIOR DISORDERS (3). A study of students with behavior disorders including causes, characteristics, and implications for educational planning. PRQ: EPSE 540 or consent of department.

EPSE 547. ISSUES AND TRENDS IN SPECIAL EDUCATION (3). An analysis of current issues and trends affecting the field of special education. Course is the culminating seminar for the master's program. PRQ: Minimum of 27 graduate program semester hours and consent of department.

EPSE 548. PROBLEMS OF THE MULTIPLY HANDICAPPED (3). An overview of the psychological, sociological, and educational problems of the multiply handicapped. Definitions, prevalence and causes of multiple handicapping conditions are discussed.

EPSE 550. COUNSELING IN BLIND REHABILITATION (3). Foundations of personal-social counseling and vocational guidance with emphasis on problems created by blindness and adjustment issues related to visual loss. PRQ: Consent of department.

EPSE 552. EDUCATIONAL PROBLEMS OF THE HARD OF HEARING (3). The educational deficit produced by impaired hearing. Theories and research in teaching the hard of hearing. PRQ: Consent of department.

EPSE 556. PROGRAMS FOR SOCIA LLY MALADJUSTED ADOLESCENTS AND YOUNG ADULTS (3). Procedures for the identification and remediation of socially maladjusted adolescents and young adults. PRQ: Consent of department.

EPSE 557. MODIFYING THE BEHAVIOR OF STUDENTS WITH DISABILITIES (3). Principles and techniques of behavioral analysis applied to the learning and behavioral management of the student exhibiting learning and behavioral difficulties. Designed to enable the classroom teacher to implement environmental and contingency management principles in the classroom. PRQ: EPSE 447 or consent of department.

EPSE 558. VOCATIONAL PROGRAMMING FOR STUDENTS WITH DISABILITIES (3). The vocational training, evaluation, and placement of students with special needs of senior high school age; the role of work-study, co-op, and internship programs. PRQ: EPSE 534, EPSE 557, and EPSE 545 or EPSE 546, or consent of department.

EPSE 561. INSTRUCTIONAL SYSTEMS FOR EDUCATING PERSONS WITH MODERATE, SEVERE, AND PROFOUND RETARDATION AND/ OR MULTIPLE HANDICAPS (3). Curriculum programs for persons with moderate, severe, and profound retardation and/or multiple handicaps. The function of ancillary programming personnel. Development of curricular packages in pre-academic and daily living skill areas. The integration of content with teaching strategy and measurement. PRQ: Consent of department. Recommended: EPSE 557.

EPSE 562. INSTRUCTIONAL SYSTEMS FOR STUDENTS WITH LEARNING DISABILITIES (3). Techniques for specific identification and educational management of students with learning disabilities. Organization, planning, and instruction for students with learning disabilities. Emphasis on the resource room/consultant model. PRQ: EPSE 534, EPSE 545, and EPSE 557, or consent of department.

EPSE 563. INSTRUCTIONAL SYSTEMS FOR STUDENTS WITH BEHAVIOR DISORDERS (3). Programs, methods, and materials in the education of students with behavior disorders. Current issues and literature dealing with teaching students with behavior disorders. PRQ: EPSE 534, EPSE 546, and EPSE 557, or consent of department.

EPSE 564. ADVANCED PROGRAM PLANNING AND EVALUATION FOR SENSORY-PHYSICALLY HANDICAPPED (3). In-depth curriculum planning based on theory and research for sensory and physically handicapped individuals. Students will be required to plan and evaluate hypothetical programs and to participate in the evaluation of operational programs in school districts. PRQ: Consent of department.

EPSE 565. COLLABORATION AND CONSULTATION SKILLS FOR SCHOOL PROFESSIONALS (3). Developing, implementing, and evaluating indirect service delivery systems for special needs learners. Emphases include interaction skills for use by professionals in schools and processes of collaboration and consultation. PRQ: EPSE 434 and EPSE 447, or consent of department.

EPSE 566. EDUCATIONAL PROCEDURES IN TEACHING THE HARD OF HEARING (3). The impact of a hearing loss on the processes of learning. Methods of overcoming the educational deficit of the hard of hearing. PRQ: EPSE 552 or consent of department.

EPSE 567. EDUCATIONAL PROCEDURES IN TEACHING THE HARD OF HEARING IMPAIRED/MULTIPLY HANDICAPPED (3). An orientation to the special problems involved in the care and education or training of persons who are hearing impaired and have other handicaps.

EPSE 568. PROBLEMS IN THE EDUCATION OF THE HEARING IMPAIRED/MULTIPLY HANDICAPPED (3). An orientation to the special problems involved in the care and education or training of persons who are hearing impaired and have other handicaps.

EPSE 569. THE EDUCATION OF PRESCHOOL DEAF CHILDREN (3). The rationale of preschool education of deaf children. Intensive training in the methods and procedures of teaching language, speech and basic reading readiness skills to preschool-aged deaf children.

EPSE 570. PRINCIPLES OF ORIENTATION AND MOBILITY TECHNIQUES FOR LEARNERS WITH VISUAL AND MULTIPLE IMPAIRMENTS (3). Techniques designed to assess the functional efficiency of kinesthetic, proproceptive, auditory, visual, tactile, thermal, and olfactory senses of learners with visual and multiple impairments. Special adaptations in orientation and mobility techniques and devices for learners with visual and multiple impairments. PRQ: EPSE 474 or consent of department.

EPSE 571. COLLABORATION AMONG INDIVIDUALS WORKING WITH INDIVIDUALS WITH VISUAL AND MULTIPLE IMPAIRMENTS (3). Specific techniques related to in-service training, and team teaching in inclusive settings. Interrelationships between and among families and specialists working with individuals with visual and multiple impairments. PRQ: Consent of department.

EPSE 572. ELECTRONIC MOBILITY AIDS FOR THE BLIND (3). Principles and practices in the use of electronic mobility aids for the totally blind. PRQ: EPSE 474 and EPSE 574, or consent of department.

EPSE 573. INSTRUCTIONAL SYSTEMS FOR UTILIZATION OF LOW VISION (3). Procedures in assessing functional vision of persons with impairments. Instructional techniques in maximizing utilization of low vision for use by learners with visual and multiple impairments. Emphasis on team management, evaluation, concomitant handicaps, and technology. PRQ: EPSE 451 or consent of department.

EPSE 574. ADVANCED ORIENTATION AND MOBILITY (3-6). Reinforcement of orientation and mobility skills and techniques, and concentration on use of the long cane for travel. Teaching and assessment of materials, procedures, and techniques; contemporary issues in the discipline; and program planning. Significant time spent participating in blindfold and simulator experiences. May be repeated to a maximum of 6 semester hours.

EPSE 575. REHABILITATION OF THE BLINDED ADULT (3). Community resources, methods, and materials to assist the blinded adult through rehabilitation. Includes history, rehabilitation models, and legislation. Emphasis on team management, evaluation, concomitant handicaps, and vocational planning.

EPSE 576. INSTRUCTIONAL SYSTEMS FOR TEACHING INDIVIDUALS WITH VISUAL AND MULTIPLE IMPAIRMENTS (3). Special methods, materials, and techniques used in the instruction of individuals with visual and multiple impairments. Emphasis on sensory stimulation, visual functioning, motor development, self-help skills, communication skills and devices, home and behavior management, and interrelationships among specialists in related fields. PRQ: EPSE 540 or consent of department.

EPSE 577. ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION (3). Overview of the functions, responsibilities, and problems in the organization, administration, and supervision of special education programs at the federal, state, and local levels. PRQ: LEA 500 or consent of department.

EPSE 579. ASSISTIVE TECHNOLOGY FOR INDIVIDUALS WITH VISUAL IMPAIRMENTS: ADVANCED APPLICATIONS (3). Emphasis on the effective use of assistive technology by persons with visual impairments. Hardware and software access issues for educational and life purposes. Not open to students with credit for EPSE 479. PRQ: EPSE 470 or consent of department.

EPSE 586A. INTERNSHIP IN ORIENTATION AND MOBILITY INSTRUCTION OF PERSONS WITH VISUAL IMPAIRMENTS (1-12). Supervised orientation and mobility instruction including the techniques of safe, independent travel and the use of the long cane. Observation
and participation in residential school, day school, and/or agency programs for individuals with visual impairments. May be repeated to a maximum of 12 semester hours. PRQ: EPSE 474 and EPSE 574, or consent of department.

EPSE 586B. INTERNSHIP IN REHABILITATION TEACHING OF PERSONS WITH VISUAL IMPAIRMENTS (1-12). Supervised instruction in rehabilitation teaching. Observation and participation in residential school, day school, and/or agency programs for individuals with visual impairments. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

EPSE 587. PRACTICUM IN SPECIAL EDUCATION (1-10). Supervised field experience in working with exceptional learners in a variety of educational settings. May be repeated to a maximum of 12 semester hours. PRQ: EPSE 447 or consent of department.

EPSE 587A. ELEMENTARY OR SECONDARY PRACTICUM IN LEARNING DISABILITIES (1-10). Supervised field experience in special education programs in schools, institutions, and other facilities for elementary and secondary students with learning disabilities. May be repeated to a maximum of 12 semester hours. PRQ: Admission to Graduate School or consent of department.

EPSE 587B. ELEMENTARY OR SECONDARY PRACTICUM IN SEVERE AND PROFOUND RETARDATION (1-10). Supervised field experience in special education programs in schools, institutions, and other facilities for elementary and secondary students with severe and profound retardation. May be repeated for experience at both elementary and secondary levels to a maximum of 12 semester hours. PRQ: Admission to Graduate School or consent of department.

EPSE 587D. ELEMENTARY OR SECONDARY PRACTICUM IN EDUCABLE MENTAL HANDICAPS (1-10). Supervised field experience in special education programs in schools, institutions, and other facilities for elementary and secondary students with educable mental handicaps. May be repeated for experience at both elementary and secondary levels to a maximum of 12 semester hours. PRQ: Admission to Graduate School or consent of department.

EPSE 587E. ELEMENTARY OR SECONDARY PRACTICUM IN BEHAVIOR DISORDERS (1-10). Supervised field experience in special education programs in schools, institutions, and other facilities for elementary and secondary students with behavior disorders. May be repeated for experience at both elementary and secondary levels to a maximum of 12 semester hours. PRQ: Admission to Graduate School or consent of department.

EPSE 587I. ELEMENTARY OR SECONDARY PRACTICUM IN VISUAL IMPAIRMENTS (1-10). Supervised field experience in special education programs in schools, institutions, and other facilities for elementary and secondary students with visual impairments. May be repeated for experience at both elementary and secondary levels to a maximum of 12 semester hours. PRQ: Admission to Graduate School or consent of department.

EPSE 587J. ELEMENTARY OR SECONDARY PRACTICUM IN EARLY CHILDHOOD SPECIAL EDUCATION (1-10). Supervised field experience in special education programs in schools, institutions, and other facilities for young children with handicaps. May be repeated for experience at both elementary and secondary levels to a maximum of 12 semester hours. PRQ: Admission to Graduate School or consent of department.

EPSE 587L. PRACTICUM IN REHABILITATION TEACHING OF THE BLIND (1-10). Supervised field experience in working with adult blind persons in activities of daily living. May be repeated to a maximum of 16 semester hours. PRQ: Consent of department.

EPSE 587N. PRACTICUM IN EARLY CHILDHOOD SPECIAL EDUCATION (1-10). Supervised field experience in special education programs for young children with disabilities. May be repeated for experience at both elementary and secondary levels to a maximum of 12 semester hours. PRQ: Admission to Graduate School and consent of department.

EPSE 587O. PRACTICUM IN INSTRUCTIONAL SYSTEMS FOR THE VISUALLY IMPAIRED (1-10). Supervised practicum in instructional systems for the visually impaired. May be repeated to a maximum of 12 semester hours. PRQ: EPSE 570 or consent of department.

EPSE 587P. PRACTICUM IN INSTRUCTIONAL SYSTEMS FOR THE MULTIPLE HANDICAPPED (1-10). Supervised practicum in instructional systems for multiply handicapped individuals. May be repeated to a maximum of 12 semester hours. PRQ: EPSE 570 or consent of department.

EPSE 587Q. PRACTICUM IN PERSPECTIVES IN LEARNING DISABILITIES (3). Examination of the development of the field of learning disabilities. Influence of past etiological theories, diagnostic practices, classification schemes, and treatment approaches on current practices. Service delivery approaches for youth and adults with mild, moderate, and severe learning disabilities. PRQ: Consent of department.

EPSE 587R. PRACTICUM IN CURRENT ISSUES IN LEARNING DISABILITIES (3). Analysis of issues in learning disabilities with the focus on literature within the current five-year period. PRQ: Consent of department.
EPSE 652. PERSPECTIVES IN BEHAVIOR DISORDERS (3). Examination of the development of the field of behavior disorders. Influence of etiological theories, diagnostic practices, classification schemes, and treatment approaches on current practices. Service delivery approaches for youth and adults with identified mild, moderate, and severe behavior disorders. PRQ: Consent of department.

EPSE 653. CURRENT ISSUES IN BEHAVIOR DISORDERS (3). Analysis of issues in behavior disorders, with the focus on literature within the current five-year period. PRQ: Consent of department.

EPSE 654. READINGS IN VISUAL IMPAIRMENTS (3). Directed readings in the area of visual impairments including, but not limited to issues related to service delivery approaches for youth and adults with visual impairments, adult blind rehabilitation, orientation and mobility, historical background, and current issues in the field. PRQ: Consent of department.

EPSE 662. ADVANCED INSTRUCTIONAL SYSTEMS FOR HANDICAPPED LEARNERS (3). A study of theories, principles, and practices in the education of the handicapped with emphasis on current research on effective schools. PRQ: Consent of department.


EPSE 666. PERSPECTIVES IN HEARING IMPAIRMENT (3). Examination of the development of the field of deaf education. Influence of past etiological theories, diagnostic practices, classification schemes, and intervention approaches on current practices. Service delivery approaches for youth and adults with mild, moderate, and severe (aided) hearing impairment.

EPSE 667. DISORDERS OF WRITTEN AND READ LANGUAGE (3). Consideration of the written and read language systems as they relate to all areas of individual development with an emphasis on the associations among these disorders and psychology of learning in the sensorially impaired and those with dysfunctions of the central nervous system. PRQ: Consent of department.

EPSE 670. WRITING FOR PUBLICATION IN EDUCATIONAL PSYCHOLOGY AND SPECIAL EDUCATION (3). Crosslisted as EPSY 670X. Planning, producing, and submitting manuscripts for publication. Includes analysis of professional journals and articles published in them with different types of publications addressed and analyzed, including review, research, and theoretical position papers.

EPSE 671. WRITING GRANT PROPOSALS IN EDUCATION (3). Crosslisted as EPSY 671X. Reviewing and writing competitive grant proposals. Identifying funding sources (federal, state, private) that match one's interests and expertise. Analysis of components of different types of grants, including research, demonstration, special project, technology, and personnel preparation grants.

EPSE 677. SPECIAL EDUCATION ADMINISTRATION (3). Advanced study of functions, responsibilities, and problems in the organization and administration of special education programs at the federal, state, and local levels. PRQ: EPSE 577 or consent of department.

EPSE 678. SEMINAR: SPECIAL EDUCATION ADMINISTRATION (3). Trends, issues, and concerns in administration of special education programs. One issue or trend will be selected for an in-depth independent library review and/or empirical study by each student. PRQ: EPSE 677 or consent of department.

EPSE 680. FIELD OBSERVATION OF SPECIAL EDUCATION PROGRAMS (1-8). Observation and evaluation of administrative programs in special education in federal, state and selected local programs. May be repeated to a maximum of 8 semester hours. PRQ: EPSE 577 and LEEA 500, or consent of department.

EPSE 686. INTERNSHIP IN SPECIAL EDUCATION (2-12). Assignment as an intern in assessment, programming, and/or administration experiences. Participation in on-going programs in residential or public schools for handicapped learners; work as a student/staff member according to the assignment that has been undertaken. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

EPSE 687. LABORATORY PRACTICUM IN PREPARING SPECIAL EDUCATORS FOR HIGHER EDUCATION (1-6). Strategies for providing instruction and experiences for preservice and in-service special education teachers. Includes program and course development, field-based programs, seminars, workshops, institutes, practicum experiences, team teaching, specialized minicourses, programmed and computer-directed instruction, and other delivery systems. Also use of media and strategy evaluation. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

EPSE 690. ISSUES IN HUMAN DEVELOPMENT IN THE ELEMENTARY THROUGH HIGH SCHOOL YEARS (3). Cognitive, socioemotional, and physical development of children and adolescents within their families, schools, and sociocultural contexts. Focus on relationships between these aspects of student development and their implications for educational approaches and teaching within a school setting. Designed for students in physical education and visual and performing arts needing K-12 teacher certification. PRQ: PSYC 102 and consent of department.

EPSE 695. SPECIAL EDUCATION ADMINISTRATION (3). Educational Psychology (EPSY) 405. Theoretical constructs, design, and procedures for laboratory research and field-based evaluation in special education. Participation in research projects required. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

EPSE 697. INDEPENDENT RESEARCH IN SPECIAL EDUCATION (1-3). Advanced study of specified problems related to the student's interest area; may cover any area of handicapping. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

EPSE 699. DOCTORAL RESEARCH AND DISSERTATION (1-15). May be repeated for additional credit to a maximum of 24 semester hours. PRQ: Candidacy for the doctoral degree and consent of chair of doctoral committee.

Educational Psychology (EPSY)

EPSY 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 seeking teacher certification in grades 5-12 only. PRQ: PSYC 102 and consent of department.

EPSY 406. ISSUES IN HUMAN DEVELOPMENT AND LEARNING IN THE MIDDLE SCHOOL AND HIGH SCHOOL YEARS (3). Cognitive, socioemotional, and physical characteristics of youth and their implications for educational practices with respect to student learning and performance in middle school and high school. Designed for students seeking teacher certification in grades 5-12 only. PRQ: PSYC 102 and consent of department.

EPSY 413. CREATIVITY AND LEARNING (3). Preservice and inservice training for elementary and secondary teachers in the nature of creativity, the creative process, the creative person, and cultivation of the creative personality. Addresses the assessment of creative processes and products. Emphasis on the creative process as it relates to education and schools.

EPSY 415. TRANSPERSONAL EDUCATION (3). An exploration of the classroom applications of transpersonal psychology, and the educational implications of consciousness research.

EPSY 419. THE MIDDLE SCHOOL CHILD (3). Examines the match between characteristics of early adolescents (10-14 years) and middle school program characteristics of middle school programs. Biological, cultural, parental, local, 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: EPSY 304 or EPSY 405, or consent of department.

EPSY 429. COMPUTERS IN CLASSROOM TEACHING (3). Crosslisted as EPCO 429X. A survey of educational uses of computers. Emphasis on the role of computers in the educational environment, hardware, review and evaluation of educational software, software applications and technology implementation. No previous experience with computers required. Designed for students entering an educational environment. Not open to students with previous experience in data processing or information systems without permission of their major department.

EPSY 433. AFFECTIVE EDUCATION (3). Crosslisted as EPCO 433X. Examines affective education programs and curriculum for students in grades K-12. Focuses on assisting teachers with developing communication skills and locating resources to promote students' emotional well-being.
EPSY 454. THE GIFTED STUDENT (3). Characteristics of the gifted. Emphasis on identification, growth and development, creativity, motivation, guidance, and evaluation of the gifted.

EPSY 492. SPECIAL TOPICS IN EDUCATIONAL PSYCHOLOGY (1-3). Study of special topics, announced in advance, in educational psychology. May be repeated to a maximum of 9 semester hours when subject varies.

EPSY 501. PSYCHOLOGICAL FOUNDATIONS OF EDUCATION (3). The broad fields of psychology as they relate to and provide foundations for educational practice. A constructive analysis of the principal areas, theories, experimentation, and conclusions in psychology with attention focused on such topics as motivation, intelligence, learning, personality, and emotions.

EPSY 506. THEORIES AND RESEARCH IN CHILD BEHAVIOR AND DEVELOPMENT (3). An analysis of theory and research concerning the nature of child development and the implications of such for classroom teachers and other professionals who work with childhood populations.

EPSY 508. THEORIES AND RESEARCH IN ADOLESCENT BEHAVIOR AND DEVELOPMENT (3). An analysis of theory and research concerning the nature of adolescent development and the implications of such for classroom teachers and other professionals who work with adolescent populations.

EPSY 510. PSYCHOEDUCATIONAL DEVELOPMENT IN ADULTHOOD (3). The study of educational and psychological theories of adult development and aging with emphasis on the evaluation of contemporary research in adult cognitive development.

EPSY 515. HUMANISTIC SOCIAL THEORY APPLIED TO EDUCATION (3). This course will investigate humanistic social theory and a brief survey of its origins in humanistic psychology, educational studies based on this approach, and relevant contributions from the social sciences.

EPSY 520. INTRODUCTION TO EDUCATIONAL RESEARCH (3). A basic course in methods of research in education; the planning and conducting of a research study: the developing of skills in problem identification, data collection, analysis, interpretation, and preparation of research reports.

EPSY 521. EDUCATIONAL STATISTICS I (3). Techniques necessary for understanding, analyzing, and interpreting data. Concepts and applications of basic descriptive methods, correlation, and simple linear regression. Introduction to probability theory and sampling. Discussion of various inferential tests of means, correlations, proportions, variances, and one-factor analysis of variance.

EPSY 522. EDUCATIONAL STATISTICS II (3). Concepts and techniques necessary for intermediate inferential methods. Analysis of variance (factorial, repeated measures, and nested designs), analysis of covariance, multiple regression, and multiple comparison procedures. PRQ: EPSY 521 or consent of department.

EPSY 525. QUALITATIVE RESEARCH IN EDUCATION (3). Introduction to the role of qualitative research in education, with emphasis on actual, hands-on research. Basic principles and focus of qualitative research will be discussed. Research methods will include case studies, ethnography, and interpretive research.

EPSY 530. TEST CONSTRUCTION AND EVALUATION (3). Modern concepts of evaluation, the preparation and use of teacher-made tests. Techniques of item analysis and concepts of reliability and validity. Procedures for assessing relatively intangible outcomes, through observational and judgmental techniques.

EPSY 531. PROGRAM EVALUATION IN EDUCATION (3). Methods of evaluating educational programs using accepted models and data-gathering procedures. The rationale for and nature of educational evaluation, planning evaluation, evaluation models, large-scale assessment programs, implementing and sampling strategies, data-gathering tools and techniques, data analysis, and reporting and interpreting evaluation results. PRQ: EPSY 520 or consent of department.

EPSY 532. EVALUATION OF TEACHERS AND TEACHING (3). Examination of major components of a comprehensive system for evaluating teachers and teaching and the related issues and teacher effectiveness literature.

EPSY 533. STANDARDIZED TESTING (3). Crosslisted as EPCO 533X. Principles of measurement as applied to group standardized measures of achievement, special aptitude, intelligence, personality, and interest for use in educational personnel work. Administering, scoring, and interpreting these measures.

EPSY 534. INDIVIDUAL EDUCATIONAL DIAGNOSIS (3). For training selected school personnel in the administration, scoring, and interpretation of individually administered tests used to diagnose the abilities of students in the classroom. Tests including the Wechsler Adult Intelligence Scale, the Revised Scale, Wechsler Intelligence Scale for Children, the Wechsler Pre-School and Primary Scales, and the Stanford-Binet will be used. PRQ: Consent of department.

EPSY 554. PROCEDURES FOR EDUCATING THE GIFTED (3). Current practices, trends, and issues in curriculum development and instructional methods for the gifted. Procedures as they relate to cognitive functions, factors of intellect, and creative expression. PRQ: EPSY 454 or consent of department.

EPSY 560. COMPUTER DATA ANALYSIS (3). A survey of common statistical packages used for conducting quantitative data analyses. Data coding, data entry, variable transformation, the use of various data analytic techniques, and the interpretation of results contrasted among personal computer statistical packages, such as SAS and SPSS. PRQ: EPSY 521 or consent of department.

EPSY 572X. ASSESSMENT METHODS IN HIGHER EDUCATION (3). EPCO 572. Basic concepts and procedures in the assessment of applicants for admission and retention and use of assessment methods for counseling to support retention in institutions of higher education. PRQ: EPCO 500 or consent of department.

EPSY 587M. PRACTICUM IN GIFTED (1-10). Supervised field experience in special education programs in schools, institutions, and other facilities for gifted students. May be repeated to a maximum of 12 semester hours. PRQ: Admission to Graduate School and consent of department.

EPSY 590. WORKSHOP IN EDUCATIONAL PSYCHOLOGY (1-3). Workshop designed for teachers, supervisors, counselors, and administrators to study contemporary issues and problems of the public school. Content varies to provide the opportunity to study current problems. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

EPSY 592. SEMINAR IN EDUCATIONAL PSYCHOLOGY (3). Review and analysis of current issues and research in educational psychology. May be repeated to a maximum of 9 semester hours when subject varies.

EPSY 597. INDEPENDENT RESEARCH (1-3). Independent research at the master's degree level under faculty supervision. May be repeated to a maximum of 6 semester hours. PRQ: Consent of faculty member who will direct research.

EPSY 599A. MASTER'S THESIS (1-6). Enrollment by special arrangement with the student's major adviser. May be repeated for a maximum of 6 semester hours.

EPSY 599B. MASTER'S PROJECT (1-6). Culminating experience. Enrollment by special arrangement with the student's major adviser. May be repeated for a maximum of 6 semester hours.

EPSY 601. PROFESSIONAL PRACTICES IN EDUCATIONAL PSYCHOLOGY (3). Examines the historical and systemic roots of educational psychology; relationships among educational psychology, education, and other behavior sciences; career options and professional practices; and current initiatives and future directions within the discipline.

EPSY 605. ADVANCED SEMINAR IN CHILD DEVELOPMENT (3). Theories of child development from conception to early adolescence. Critical analysis of theories with application to contemporary issues and problems in child development. Critical analysis of theories with application to contemporary issues and problems in child development and behavior. PRQ: Consent of department.

EPSY 606. RESEARCH IN CHILD DEVELOPMENT (3). An examination and analysis of recent research in child development. Focus on the development of skills for conducting research in child development applicable to all educational settings. PRQ: EPSY 605 or consent of department.

EPSY 608. ADVANCED RESEARCH SEMINAR IN ADOLESCENT DEVELOPMENT (3). In-depth examination of selected research methods and topics in adolescent development. Particular focus on student research and secondary analysis of existing data sets pertaining to various dimensions of adolescent development within educational contexts. PRQ: EPSY 508 and EPSY 520, or consent of department.

EPSY 610. ADVANCED SEMINAR IN HUMAN DEVELOPMENT (3). An in-depth study of the field of human development including child development, adolescent development, and an emphasis on maturity and old age. The primary orientation will be toward theories of human development.
EPSY 613. ADVANCED EDUCATIONAL PSYCHOLOGY (3). Detailed analysis of modern learning theories and practices as they relate to education. Further development of major areas of human growth as they relate to the school. A detailed investigation of major research in educational psychology. PRQ: EPSY 501 or consent of department.

EPSY 614. INSTRUCTIONAL PSYCHOLOGY (3). Crosslisted as PSYC 514X. Models and theories of instructional psychology as related to contemporary research in cognition. PRQ: EPSY 613, a course in cognitive psychology, or consent of department.

EPSY 615. EDUCATION AND HUMAN INFORMATION PROCESSING (3). Implications of human information processing and memory research techniques and their application to learning situations.

EPSY 616. LEARNING RESEARCH PRACTICUM (3). Extended study of learning theory and individual research focusing on specific and persistent problems of design, translation and interpretation of learning research for educators. May be repeated to a maximum of 6 semester hours. PRQ: EPSY 521 and EPSY 613, or consent of department.

EPSY 616. RESEARCH SEMINAR IN MOTIVATION AND EDUCATION (3). Critical analysis of current motivation theories and research in educational settings. Emphasis on issues of research design and interpretation for educators. PRQ: EPSY 613.

EPSY 620. EDUCATIONAL RESEARCH PLANNING AND INTERPRETATION (3). An advanced course dealing with problems in criterion definition and various handicaps in deriving valid inferences. An analysis is made of how these handicaps can be resolved by study design and tool data, and sample selection. PRQ: EPSY 520 and EPSY 521, or consent of department.

EPSY 621. NONPARAMETRIC STATISTICS (3). Application, computation, and interpretations of nonparametric statistical tests and correlation measures. Comparison of these tools and techniques with their parametric counterparts. PRQ: EPSY 521 and EPSY 522, or consent of department.

EPSY 622. METHODS OF MULTIVARIATE ANALYSIS (3). An introduction to methods appropriate for analyzing multivariate relationships. Canonical correlation, discriminant cluster, and factor analysis; multivariate analysis of variance and structural equation modeling. PRQ: EPSY 522 or consent of department.

EPSY 625. BAYESIAN APPROACH TO EDUCATIONAL STATISTICS AND DECISION MAKING (3). Subjective probabilistic assessments of data using Bayesian analysis and inference. Implications for research problems, designs and interpretations. Computer applications. PRQ: EPSY 521 and EPSY 522, or consent of department.

EPSY 633. ORGANIZATION AND ADMINISTRATION OF THE SCHOOL TESTING PROGRAM (3). Procedures of establishing goals for the school testing program, selecting tests appropriate to stated goals, coordinating the testing program with other members of the school’s professional staff and using test results in curriculum analyses and in administrative decisions. PRQ: EPSY 530 or EPSY 533, or consent of department.

EPSY 634. CONSTRUCTION OF SCALING INSTRUMENTS (3). Techniques of scale construction for use in assessing attitudinal, interest, temperament, personality variables, and psychomotor skills; reliability and validity of each technique. PRQ: EPSY 522 or consent of department.

EPSY 635. THEORY OF MEASUREMENT (3). Analysis of theoretical approaches to reliability, validity, item analysis and factor analysis. Exploration of related measurement problems. PRQ: EPSY 521 and either EPSY 530 or EPSY 533, or consent of department.

EPSY 639. FIELDWORK METHODS IN EDUCATIONAL RESEARCH (3). Concentration on fieldwork methods in educational research. Concentration on studying examples of educational fieldwork and actual hands-on research. PRQ: EPSY 526 or ANTH 460.

EPSY 640. INTERPRETIVE METHODS IN EDUCATIONAL RESEARCH (3). Concentration on structuralist, poststructuralist, and semiotic theories and techniques in education to develop systematic hands-on interpretive projects. PRQ: EPSY 525.

EPSY 670X. WRITING FOR PUBLICATION IN EDUCATIONAL PSYCHOLOGY AND SPECIAL EDUCATION (3). EPSE 670. Planning, producing, and submitting manuscripts for publication. Includes analysis of professional journals and articles published in them with different types of publications addressed and analyzed, including review, research, and theoretical position papers.

EPSY 671X. WRITING GRANT PROPOSALS IN EDUCATION (3). EPSE 671. Reviewing and writing competitive grant proposals. Identifying funding sources (federal, state, private) that match one’s interests and expertise. Analysis of components of different types of grants, including research, demonstration, special project, technology, and personnel preparation grants.

EPSY 686. INTERNSHIP (1-12). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. Open only to doctoral students, or by consent of department. May be repeated to a maximum of 12 semester hours.

EPSY 692. ADVANCED RESEARCH SEMINAR IN EDUCATIONAL PSYCHOLOGY (3). Students will design and conduct a study dealing with a problem in educational psychology. It may be a pilot study related to the doctoral dissertation. May be repeated to a maximum of 12 semester hours. PRQ: Master’s degree.

EPSY 697. INDEPENDENT RESEARCH (1-3). Independent research at post-master’s degree levels under faculty supervision. May be repeated to a maximum of 6 semester hours.

EPSY 699. DOCTORAL RESEARCH AND DISSERTATION (1-15). May be repeated for additional credit to a maximum of 24 semester hours. PRQ: Candidacy for the doctoral degree and consent of chair of doctoral committee.
Chair: Gary L. McConeghy

Graduate Faculty

Margaret L. Bailey, assistant professor, Ph.D., Kansas State University
Keith M. Collins, professor, Ph.D., Michigan State University
G. Robb Cooper, associate professor, Ph.D., J.D., Loyola University
Phyllis M. Cunningham, professor, Distinguished Teaching Professor, Ph.D., University of Chicago
Ronald E. Everett, professor, Ph.D., University of Utah
Connie Lee Fulmer, associate professor, Ph.D., Pennsylvania State University
Thomas E. Glass, professor, Ed.D., Wayne State University
David G. Gueulette, professor, Ph.D., Ohio State University
LaVonne Gant, assistant professor, Ed.D., Pennsylvania State University
Paul J. Ilsley, professor, Ed.D., Northern Illinois University
Jorge Jeria, associate professor, Ph.D., Iowa State University
Donald Johnson, associate professor, Ed.D., Northern Illinois University
Manuel Jordan, assistant professor, Ed.D., University of Georgia
Robert M. Lang, professor, Ed.D., Indiana University
James A. Lockard, professor, Presidential Teaching Professor, Ph.D., Iowa State University
Richard W. MacFeely, associate professor, Ed.D., University of Illinois
Muriel E. Mackett, professor, Ph.D., Ohio State University
Rosita L. Marcano, assistant professor, Ed.D., Northern Illinois University
Robert C. Mason, professor, Ed.D., University of Nebraska
Gary L. McConeghy, professor, Ed.D., Wayne State University
Wilma R. Miranda, professor, Ph.D., State University of New York, Buffalo
Diann Musial, professor, Ed.D., Northern Illinois University
John A. Niemi, professor, Distinguished Teaching Professor, Ed.D., University of California, Los Angeles
Jeri M. Nowakowski, associate professor, Ed.D., Western Michigan University
Richard A. Orem, professor, Ed.D., University of Georgia
David B. Ripley, professor, Ph.D., University of Iowa
Rhonda S. Robinson, professor, Ph.D., University of Wisconsin
Amy D. Rose, associate professor, Ed.D., Columbia University
Gene L. Roth, professor, Ph.D., Southern Illinois University
Guy Senese, associate professor, Ph.D., University of Illinois
L. Glenn Smith, professor, Ph.D., University of Oklahoma
Susan J. Stratton, assistant professor, Ph.D., University of Iowa
Manfred Thuillen, professor, Ph.D., Louisiana State University
Alfonzo Thurman, professor, Ph.D., University of Wisconsin
Andrew G. Torok, associate professor, Ph.D., Case Western Reserve University
Lucy F. Townsend, associate professor, Ph.D., Loyola University of Chicago
Brent E. Wholeben, professor, Ph.D., University of Wisconsin
William H. Young III, professor, Ed.D., Pennsylvania State University

Master of Science in Education
Adult continuing education
Educational administration
Foundations of education
Instructional technology
School business management

Educational Specialist
Educational administration

Doctor of Education
Adult continuing education
Educational administration
Instructional technology

Admission

Decisions about admission to programs in the department are ordinarily made once each term. To be assured of consideration, completed applications containing all required data must be received by the Graduate School no later than June 1 for admission for the fall term, November 1 for admission for the spring term, and April 1 for admission for the summer session. Students seeking admission to the M.S.Ed. program in school business management may substitute GMAT scores for GRE scores.

Any applicant who is denied admission to a program in the department may submit to the appropriate program admissions committee a written request for reconsideration that includes information not previously submitted. Final decisions of program admissions committees may be appealed to the department's Committee on Admissions, Retention, and Professional Standards. Appeals to this committee must be in writing and must explain the basis for the appeal.

Deficiency Study/Field Work

In cases in which students' backgrounds in their chosen specialty are limited, they may be required to fulfill deficiency requirements. Supervised field work is sometimes required in a given program of study especially when, in the adviser's judgment, it is necessary to prepare the student in a chosen specialty.

Internship Programs

The Department of Leadership and Educational Policy Studies currently utilizes internship programs in the areas of adult continuing education, educational administration, foundations of education, instructional technology, and school business management. For further information and internship possibilities see course descriptions.
Office of Research and Evaluation in Adult Continuing Education (RE/ACE)

The RE/ACE Office encourages and facilitates communication and shared research among the university's professional continuing education staff and the faculty of the graduate program in adult continuing education. This liaison between practice and research permits the sharing of teaching and research expertise of the adult continuing education faculty through off-campus courses, internships, and co-sponsorship of grants. In addition, faculty receive an opportunity to keep abreast of current practice and research needs in the field.

Master of Science in Education in Adult Continuing Education
Educational Administration
Foundations of Education
Instructional Technology
School Business Management

Admission

An applicant for admission to a departmental program is required to submit scores on the General Test of the GRE (either GRE or GMAT scores for school business management students); provide two letters of recommendation from professors, employers, or supervisors which provide supportive evidence of an applicant's professional qualifications; and demonstrate satisfactory academic and professional progress as indicated by data included in the application for admission to the Graduate School.

Prospective students who fail to satisfy the GPA criterion for admission to the Graduate School may request special consideration of their applications. Such a request must be in writing, must include compensatory evidence related to the deficiency, and should accompany the application for admission to the Graduate School. Final decisions regarding admissions are made by program committees of the department on the basis of a total profile of an individual's qualifications.

General Requirements

Majors in adult continuing education, educational administration, and instructional technology, may earn the M.S.Ed. degree by electing either the thesis or non-thesis option. Foundations of education majors must select the thesis option, and school business management majors must select the non-thesis option. In either option, the requirements are a minimum of 30 semester hours which are distributed as follows.

Thesis Option

One graduate-level course in research, normally 3 semester hours, approved by student's adviser
Two graduate courses in educational foundations (may include historical, philosophical, psychological, or socio-cultural foundations courses), normally 6 semester hours, approved by student's adviser
15 additional semester hours, approved by the student's adviser (15)
Master's thesis (3-6)

Non-Thesis Option

Same basic requirements as Option 1 except that the thesis is not required. Instead, 6 semester hours in the major field are selected with the approval of the student's adviser.

Program Descriptions

Adult Continuing Education

This 30-semester-hour program offers practitioners improved theoretical and methodological bases for professional behavior while providing comprehensive preservice education for persons seeking careers in this field. The program provides opportunities for individualization to take into account the student's goals and needs. Usually it includes faculty-supervised internship in programming, teaching, counseling, or evaluating. It prepares adult educators for work in such settings as higher education, schools, business and industry, religious organizations, professional associations, libraries, government, correctional and other agencies concerned with physical and mental health, community problem solving, and the undereducated adult.

Students pursuing the non-thesis option fulfill the comprehensive examination requirement by successfully completing either a proctored essay examination or a comprehensive writing assignment while enrolled in LEAC 598; students pursuing the thesis option fulfill this requirement in conjunction with the thesis defense.

Educational Administration

This is a 33-semester-hour program intended for the beginning student of school administration and should be of particular interest to persons who are entering administrative work. The emphasis is on areas of administrative responsibility, leadership skills, and technical and theoretical resources. The program is designed to fulfill educational requirements for the general administrative endorsement to the Illinois General Administrative Certificate.

Foundations of Education

This program provides the student with a theoretical understanding of education–philosophical, historical, social and comparative–giving a meaningful context in the analysis of educational problems and controversies. A reflective, inquiring approach is the intended outcome for educators enrolled in the program. The foundations program serves students wishing to gain a broad-based knowledge of educational theory as well as those majoring in the field. Individual needs and goals of students are considered in the advisement process; courses may be selected from appropriate departments throughout the university.

Instructional Technology

The 39-semester-hour program leading to the M.S.Ed. in instructional technology was developed to provide specialized training for those preparing for careers in educational technology, media specialists, as instructional developers in business and industrial training departments, or as producers of software in a variety of locations. Students will develop competencies in such areas as instructional software design and development; instructional design, development, and evaluation; media administration; and program evaluation. Students focusing in instructional design and development or pursuing instructional media certification may be required to take internship or practicum courses as part of their degree or program requirements.

School Business Management

This is a 39-semester-hour program intended to prepare persons to serve as school business managers. Students, under the direction of an adviser, will plan a program of studies which will include course work, internship, and field experiences directly related to the school business management function in elementary and secondary, or college educational systems. It is not necessary to have a teaching certificate to apply for this program. A student who completes the M.S.Ed. in school business management will satisfy the educational requirements for the chief school business official endorsement to the Illinois General Administrative Certificate. Program flexibility permits elective courses which may be applied toward meeting minimal educational requirements for the general administrative endorsement.
Students who seek the M.S.Ed. with a major in school business management are required to complete the core courses in the following sequence.

LEEA 500, Educational Organization and Administration: Principles, Concepts, and Structure (3)
LEBM 501, School Business Management (3)
LEEA 520, Education Finance I (3)
LEBM 521, Accounting, Statement Analysis, and Budgeting (3)
LEBM 550, Financial Planning and School Budgeting (3)
LEBM 590, Workshop in School Business Management (1-3)
LEBM 530, Management and Business Support Services (3)
LEBM 621, Advanced School Fund Accounting and Budgeting (3)

Each student is also required to complete a full-year internship experience. Students seeking an internship must make application and receive approval of the internship plan. A full-year internship is defined as having an internship plan which is approved by the program adviser and being registered for 2 semester hours of LEBM 586 for each of three consecutive terms. The internship may begin any term after LEEA 520 and LEBM 521 have been completed. Nine semester hours relating to the foundations of education and educational research must be completed by each student and can be taken any time during the program. Normally these courses will include EPSY 520, LEFE 500, and either CISC 500 or EPSY 501.

Students who have already earned an appropriate and related master's degree from an accredited college or university with an approved teacher education program can take specific school business courses to qualify for the chief school business official (CSBO) endorsement. These students must apply for and receive student-at-large status from the Graduate School, meet all other state requirements for the CSBO endorsement, and complete LEBM 501 (3), LEBM 521 (3), LEBM 550 (3), LEBM 586 (6), LEBM 621 (3), LEEA 500 (3), and LEEA 520 (3).

Certification in Instructional Media

Two types of instructional media certification are offered by the instructional technology faculty. A media professional endorsement is granted to those who have an existing teaching certificate and have completed 18 hours of specified graduate-level media courses. The K-12 media specialist certification is granted to those who complete a specified 32-hour plan of graduate courses. In either case, the student must also be recommended for certification or endorsement by the university. Students who are interested in either of these certifications should contact the instructional technology faculty.

Educational Specialist in Educational Administration

This 33-semester-hour program of advanced study in educational administration is designed to prepare eligible graduate students for various administrative positions in school systems. It emphasizes the technical and specialized aspects of administration. In addition, it includes studies intended to refine the student’s competence to deal with more general aspects of educational theory. This area is appropriate for the person who wants to fulfill the educational requirements for the superintendent endorsement to the Illinois General Administrative Certificate.

Admission

An applicant for admission to a departmental program is generally expected to meet or exceed the following requirements.

Two letters of recommendation from professors, employers, or supervisors which provide supportive evidence of an applicant's professional qualifications.

Satisfactory academic and professional progress as indicated by data included in the application for admission to the Graduate School.

Following screening based on the above criteria, possible participation in a preadmission interview.

Prospective students who fail to satisfy the GPA criterion for admission to the Graduate School may request special consideration of their applications. Such a request must be in writing, must include compensatory evidence related to the deficiency, and should accompany the application for admission to the Graduate School. Decisions regarding admissions are made by program committees of the department on the basis of a total profile of an individual’s qualifications.

An applicant for admission into the Ed.S. program must apply to the dean of the Graduate School for admission to the Graduate School for the Ed.S. program, work with an interim adviser planning work for the first semester, arrange an interview with the chair of his or her advisory committee after receiving notification of acceptance by the departmental admission committee, confer with the advisory committee to plan a program of study. (Quadruplicate copies of the program shall be prepared.)

Two letters of recommendation are required from persons who can write analytically about the applicant's academic qualifications, ability to do graduate work, and other professional qualifications. A minimum of one such letter should be from a professor and one from an employer or supervisor. Additional information and materials related to the applicant's total profile of qualifications may be requested by the Faculty Admissions Committee and must be received by no later than June 1 for fall admission consideration, November 1 for spring admission consideration, and April 1 for summer admission consideration.

Doctor of Education in Adult Continuing Education Educational Administration Instructional Technology

Admission

This degree is intended to prepare superior teachers, administrators, service personnel, and scholars of education. In addition to other functions, the programs prepare individuals for teaching at the college level. Research skills are an integral part of each program.

An applicant for admission to a departmental program is generally expected to meet or exceed the following requirements.

Three letters of recommendation from professors, employers, or supervisors which provide supportive evidence of an applicant's professional qualifications.

Satisfactory academic and professional progress as indicated by data included in the application for admission to the Graduate School.

For qualified applicants to doctoral programs, demonstration of writing competencies and participation in a preadmission interview before a final admission decision is made.

Prospective students who fail to satisfy the GPA criterion for admission to the Graduate School may request special consideration of their applications. Such a request must be in writing, must include compensatory evidence related to the deficiency, and should accompany the application for admission to the Graduate School. Final decisions regarding admissions are made by program committees of the department on the basis of a total profile of an individual’s qualifications.
Program Descriptions

Adult Continuing Education
This program provides a flexible system of professional preparation in the field of adult continuing education. A required core of learning experiences is supplemented by additional course work in areas of instruction, administration, and research to prepare both generalists and specialists in the field.

Major objectives are to prepare persons for leadership roles in adult continuing education and continuing professional education, graduate teaching, and administrative positions in adult education—for example, health fields, community schools, voluntary agencies, university extension, industrial training, community services, adult basic education, churches, and government; and to prepare persons as professional practitioners who address themselves successfully to the current and future problems related to adult learning and education of adults.

The program is intended to be flexible and is influenced by students as they meet with their advisory committees. Although each program will be designed around the individual needs of the student, taking into account his or her background and future professional interests, the requirements of the College of Education and Graduate School will be met.

Educational Administration
The doctoral program is intended to prepare individuals who demonstrate superior qualities and attainment for administrative service in schools and other agencies or for college teaching. It synthesizes knowledge gained in the master's program and Ed.S. program. The doctoral program provides instructional experiences designed for satisfactory development of conceptual, human, and technical skills and understandings required for successful school administration with emphasis on educational research, the place of the school leader in the social order, community power structure, and organizational theory.

Three letters of recommendation are required from persons who will write analytically about the applicant's academic qualifications, ability to do graduate work, and other professional qualifications. A minimum of two such letters should be from professors and one from an employer or supervisor. Additional information and materials related to the applicant's total profile of qualifications may be requested by the Faculty Admissions Committee and must be received no later than June 1 for fall admission consideration, November 1 for spring admission consideration, and April 1 for summer admission consideration.

Instructional Technology
The Ed.D. in instructional technology prepares administrators, designers, and instructors in the field of instructional technology. Graduates have been employed by universities, community colleges, businesses, industry, and government in positions associated with technological improvement and development. Students focusing in instructional design and development or pursuing media certification may be required to take internship or practicum courses as part of their degree or program requirements.

Cognate in Foundations of Education
Several areas of cognate studies are offered in foundations of education, any of which can be taken in conjunction with doctoral programs in other fields. Cognates include history of education, philosophy of education, and foundations of education. Semester hours may range from 9 to 15.

Requirements
Applicants for the Ed.D. degree are expected to have a broad base of general education in the humanities, sciences, and social sciences, represented by a minimum of 75 undergraduate and graduate semester hours distributed equitably among the various fields. Where significant deficiencies are found by the student's advisory committee, additional semester hours above the 93 required for the doctoral degree may be prescribed.

The Department of Leadership and Educational Policy Studies requires a minimum of 93 semester hours of graduate work beyond the baccalaureate degree including the dissertation and including the following. With the approval of the department and the office of the dean of the Graduate School, a master's degree may be accepted in lieu of 30 of the 93 semester hours.

A minimum of 15 semester hours of graduate-level course work in research understandings and skills, learning and development theories, and socio-cultural analyses of education.

A minimum of 18 semester hours of graduate-level course work (excluding dissertation hours) in the major.

A cognate component selected from outside the major to provide a broader base of knowledge, a supportive professional skill, or more sophisticated research competencies. No specific number of semester hours is required.

A minimum of 63 semester hours beyond the master's degree.

A dissertation earning at least 15 semester hours.

A typical doctoral program includes study in a variety of disciplines within the university. Ordinarily, a minimum of 9 semester hours of course work is pursued in other colleges. These credits may be taken within the common requirements, the cognate component, or the student's major.

The dissertation represents a substantial contribution to knowledge in the candidate's major field of study. Candidates are expected to conduct original scholarship and independent research appropriate to their major and communicate the results of their research effectively.

Examinations

Candidacy examination. A written candidacy examination is scheduled and administered at least twice a year. A graduate student eligible to take this examination, with the permission of the chair of the doctoral committee, will have completed at least two-thirds of his or her studies including the common requirements. Dates on which application for the examination can be made are announced by the Department of Leadership and Educational Policy Studies. This examination encompasses major areas of professional knowledge. Any student who fails may, with the recommendation of the committee, be granted the opportunity to take a second examination. The second examination, however, is final.

Final examination. A final oral examination related to the dissertation is required and is conducted in accordance with the general requirements of the Graduate School.

Qualifying examination. Before attempting the candidacy examination, students pursuing a major in adult continuing education or in educational administration are required to pass a qualifying examination. For students majoring in adult continuing education, this examination must be taken after completion of 15 but before completion of 30 semester hours of an approved program of courses, not including deficiency courses or courses taken as part of a master's program. For students majoring in educational administration, this examination must be taken after completion of the first 18 hours of an approved program of courses, not including deficiency courses or courses taken as part of a master's program. A student who fails this examination may be allowed to repeat it after a period of time determined by the student's advisory committee. A student who fails this examination a second time, or is not granted permission for a second attempt, will not be permitted to continue work toward the doctorate, and admission to the doctoral program will be terminated. A student must have an approved program of courses and be registered in the term in which the qualifying examination is taken.
Course List

Adult Continuing Education (LEAC)

LEAC 400. THE NATURE OF ADULT CONTINUING EDUCATION (3). Designed for students studying in various departments and areas who wish to explore the field as it exists in basic education, high schools, community colleges, universities, private schools, businesses, governmental agencies, nonprofit organizations, and churches. The historical, philosophical, and sociological bases of adult education with emphasis on present roles and future trends in the field.

LEAC 431X. TECHNIQUES OF TUTORING AND LEARNING ASSISTANCE (3). CIRE 431. Methods and techniques for peer tutoring, supplemental instruction, learning assistance, or literacy tutoring. Development of tutorial resource materials. Basic assessment and remedial or developmental processes in content area tutoring, study strategies, and learning assistance. Experiences with tutorial programs, learning assistance programs, or supplemental instruction groups.

LEAC 490. WORKSHOP IN ADULT CONTINUING EDUCATION (1-3). Opportunity provided to work cooperatively under the guidance and supervision of an experienced adult educator. An intensive analysis of specific programs of adult education. The literature of the field and the techniques of studying agency problems. Special projects assigned to each student for intensive study. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

LEAC 492. SPECIAL TOPICS IN ADULT CONTINUING EDUCATION (1-3). Study of special topics, announced in advance, in adult continuing education. May be repeated to a maximum of 9 semester hours when subject varies.

LEAC 501. ADULT LEARNING: MATURITY THROUGH OLD AGE (3). An inquiry into learning theories and their relationships to mature and aging adults. Focus on the development of educational programs and classes which address these issues.

LEAC 502. EDUCATING CULTURALLY DIVERSE ADULTS (3). Analysis and critique of economic, educational, sociological, cultural, and professional issues having an impact on the education of culturally diverse adults. Focus on the development of educational programs and classes which address these issues.

LEAC 530. INSTRUCTIONAL THEORY AND PRACTICE IN TEACHING ADULTS (1-3). The development of methods, techniques, and strategies for the instruction of adults.

LEAC 533. LEARNING HOW TO LEARN: APPLIED THEORY FOR ADULTS (3). Understandings and skills that enable adults to learn effectively in classrooms, small groups, and individually. Participation training and self-directed education are explored in a laboratory setting. Implications for adult education agencies are identified.

LEAC 540. CURRICULUM AND PROGRAM DEVELOPMENT IN ADULT CONTINUING EDUCATION (3). The application of curriculum development and program planning principles to education and training programs designed specifically for the adult learner.

LEAC 544. ALTERNATIVES IN THE COUNSELING AND PLACEMENT OF ADULTS (1-3). Crosslisted as EPCO 569X. An examination and identification of promising alternatives in the facilitation of adult career development through guidance, counseling, and vocational placement. May be repeated to a maximum of 3 semester hours.

LEAC 545. PLANNING AND PROMOTING NONCREDIT ADULT CONTINUING EDUCATION (1-3). Strategies for needs assessment and marketing for noncredit adult continuing education; program models and techniques for reaching specific target audiences. Consider student-identified programming concerns through a practicum-workshop approach. May be repeated to a maximum of 3 semester hours.

LEAC 550. TEACHING ADULTS ENGLISH AS A SECOND LANGUAGE (3). A. Methods and Materials for Teaching Oral Skills B. Methods and Materials for Teaching Literacy Skills C. Organizing Instruction of English Language Skills D. Influence of Cultural Backgrounds on English Language Development An examination of current practices in the teaching of English as a second language in adult education settings. Consideration given to psychological, social, and cultural conditions surrounding the adult second language learner. Credit is limited to 3 semester hours per topic.

LEAC 560. NONTRADITIONAL ADULT EDUCATION (3). The historical background, conceptual base, and literature of alternative approaches to the education of adults. Include nontraditional movements such as open learning systems for adults, the free university, learning exchanges, folk schools, and field studies of current adult programs, their structure and content.

LEAC 561. HUMAN RESOURCE DEVELOPMENT (3). Crosslisted as EPCO 561X and LEIT 561X. The nature and function of programs for developing human resources in business, education, industry, government, social services, and voluntary organizations.

LEAC 565. CONTINUING EDUCATION FOR PROFESSIONAL GROUPS (3). Explication and critique of frameworks for understanding the goals, processes, and outcomes of continuing education. Exploration of the design and development of continuing education programs for adults in professional roles.

LEAC 568. CONTINUING HIGHER EDUCATION (3). An analysis and critique of the current practices of continuing education in institutions of higher education with application to organization and administration, programmatic thrusts and intended audiences, financial management, marketing and promotion, delivery systems, and collaboration among higher education institutions.

LEAC 570. ORGANIZATION AND ADMINISTRATION OF ADULT CONTINUING EDUCATION (3). Organizing, financing, staffing, promoting, and evaluating programs of adult education. Teaching resources and the role of the adult education administrator.

LEAC 575. POLICY STUDIES IN ADULT CONTINUING EDUCATION (3). Critical analysis of the formation and implementation of adult continuing education policy within educational and other social institutions. Use of a variety of theoretical perspectives to examine selected case studies from the comparative adult continuing education literature and the students' own work experience, as well as alternative adult continuing education policies.

LEAC 586. INTERNSHIP IN ADULT CONTINUING EDUCATION (3). Work individually or in small groups in a practical situation under the guidance of a staff member from that setting and a university supervisor. May be repeated to a maximum of 15 semester hours, although typically only 9 semester hours may be applied to the program of study.

LEAC 590. WORKSHOP IN ADULT CONTINUING EDUCATION (1-3). Workshop designed for teachers, counselors, and administrators to study contemporary issues in adult continuing education. May be repeated to a maximum of 12 semester hours when content varies. PRQ: Consent of department.

LEAC 597. INDEPENDENT RESEARCH IN ADULT CONTINUING EDUCATION (1-6). Independent research at the master's degree level under faculty supervision. May be repeated to a maximum of 6 semester hours. PRQ: Admission to master's degree program and consent of faculty member who will direct research.

LEAC 598. ISSUES IN ADULT CONTINUING EDUCATION (3). Integration and synthesis of the concepts, principles, trends, and issues in adult continuing education. Not open to doctoral students in the field of adult continuing education. PRQ: Completion of 24 semester hours in an approved master's level program, or consent of department.

LEAC 599. MASTER'S THESIS (1-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: EPSY 520.

LEAC 600. SEMINAR IN ADULT CONTINUING EDUCATION (1-6). Advanced study and discussion of important issues relating to the field and profession of adult continuing education. Group and individual interests contribute to the design of the course. May be repeated to a maximum of 21 semester hours when topic varies. PRQ: Consent of department.

LEAC 610. EVALUATING ADULT CONTINUING EDUCATION PROGRAMS (3). An advanced study of program design and evaluation methods necessary to analyze and improve programs in adult continuing education effectively.

LEAC 615. STRATEGIC HUMAN RESOURCE DEVELOPMENT (3). Crosslisted as EPCO 615X and LEIT 615X. Advanced study emphasizing complex skills, concepts, and strategies relating to the adult teaching/learning component of human resource development in business, industry, government, and voluntary organizations.
LEAC 620. REVIEW OF RESEARCH IN ADULT CONTINUING EDUCATION (3). A comprehensive study of research literature in adult continuing education and related social science fields. Emphasis on the examination of diagnostic instruments.


LEAC 650. SCHOOL-COMMUNITY RELATIONS (3). The responsibility of the school to offer leadership in home-school-community relationships. The tasks of surveying and utilizing community resources, studying promising programs and practices, and evaluating educational criticism. Clinical experiences are included.

LEAC 652. POLICY ANALYSIS FOR SCHOOL ADMINISTRATORS (3). Policy making, implementing, and evaluating at the school site and school district levels, the skills of policy analysis and policy development; the identification of issues appropriate for policy study in the school district and at the school site; the principal in related roles. PRQ: LEEA 500 and LEEA 520 or LEFE 521, or consent of department.

LEAC 658. INTERNSHIP IN EDUCATIONAL ADMINISTRATION (3-12). Work individually or in small groups in a practical situation under the guidance of a staff member from that setting and a university supervisor. Open only to Ed.S. and doctoral students, or by consent of department. May be repeated to a maximum of 12 semester hours, although typically only 12 semester hours may be applied to the program of study.

LEAC 659. DOCTORAL RESEARCH AND DISSERTATION (1-15). May be repeated. Student must accumulate 18 semester hours prior to graduation. PRQ: Candidacy for the doctoral degree and consent of chair of the office committee.

Educational Administration (LEEA)

LEEA 500. EDUCATIONAL ORGANIZATION AND ADMINISTRATION: PRINCIPLES, CONCEPTS, AND STRUCTURE (3). Development of an awareness and understanding of the social, political, and behavioral bases for educational administration.

LEEA 501. SCHOOL ORGANIZATION AND ADMINISTRATION: PROGRAMS AND PRACTICES (3). Examination of administrative practices in the areas of educational programs, staff and pupil personnel functions, physical plant, finance and business management, and school-community relations. PRQ: LEEA 500 or consent of department.

LEEA 511. THE PRINCIPALSHIP (3). Basic performance patterns of elementary, middle, and secondary school principals in the organization and administration of the education process. Clinical experiences appropriate to each level of administration. PRQ: LEEA 500 and a minimum of 15 additional semester hours in the educational administration program, or consent of department.

LEEA 520. EDUCATION FINANCE I (3). Survey of social, economic, and political considerations in public financing of education. Examination of sources of revenues, federal-state-local allocation systems, and local educational agency financial planning and budgeting. Clinical experiences are included. PRQ: LEEA 500 or consent of department.

LEEA 525. EDUCATION LAW I (3). Survey course on legal problems in educational settings. Designed for students in master's degree programs. Clinical experiences are included.

LEEA 535X. SUPERVISORY BEHAVIOR (3). CISC 535. The theoretical constructs underlying supervisory behavior in educational settings and applications of related principles to the supervision and management of educational personnel.

LEEA 540. SCHOOL-COMMUNITY RELATIONS (3). The responsibility of the school to offer leadership in home-school-community relationships. The tasks of surveying and utilizing community resources, studying promising programs and practices, and evaluating educational criticism. Clinical experiences are included.

LEEA 550. SEMINAR: PROBLEMS IN EDUCATIONAL ADMINISTRATION (3). A seminar requiring individual investigation of fundamental problems in educational administration and business management, culminating in a research paper. Problems based largely on past or anticipated experience of the students. PRQ: LEEA 500 or consent of department.

LEEA 554. POLICY ANALYSIS FOR SCHOOL ADMINISTRATORS (3). Policy making, implementing, and evaluating at the school site and school district levels, the skills of policy analysis and policy development; the identification of issues appropriate for policy study in the school district and at the school site; the principal in related roles. PRQ: LEEA 500 and LEEA 500 or LEFE 521, or consent of department.

LEEA 580. CLINICAL LABORATORY, BUILDING-LEVEL ADMINISTRATION (1). Laboratory-based clinical experiences including individual and group classroom exercises and simulations focused on building-level administrative tasks and functions. Required for general administrative endorsement. PRQ: LEEA 511 or consent of department. CRQ: LEEA 520, LEEA 525, or LEEA 535X.

LEEA 586. INTERNERN IN EDUCATIONAL ADMINISTRATION (3-12). Work individually or in small groups in a practical situation under the guidance of a staff member from that setting and a university supervisor. Open only to Ed.S. and doctoral students, or by consent of department. May be repeated to a maximum of 12 semester hours, although typically only 3 semester hours may be applied to a graduate degree program. PRQ: LEEA 500, LEEA 511, and 15 additional semester hours in the educational administration program, or consent of department.

LEEA 590. WORKSHOP IN EDUCATIONAL ADMINISTRATION (1-3). Workshop designed for teachers, supervisors, and educational administrators to study contemporary issues and problems in education. Content varies to provide the opportunity to study current problems. May be repeated to a maximum of 12 semester hours. PRQ: Acceptance by the director of the workshop.

LEEA 592. SPECIAL TOPICS IN EDUCATIONAL ADMINISTRATION (1-3). Study of special topics, announced in advance, in educational administration. May be repeated to a maximum of 12 semester hours when topic varies. PRQ: Consent of department.

LEEA 597. INDEPENDENT RESEARCH IN EDUCATIONAL ADMINISTRATION (1-6). Independent research at post-master's degree levels under faculty supervision. May be repeated to a maximum of 12 semester hours, although typically only 6 semester hours are applied to the program of study.

LEEA 615. EDUCATIONAL FACILITIES (3). Educational facilities planning, design, and supervision. Clinical experiences are included. PRQ: LEEA 500 or consent of department.

LEEA 610. THE SUPERINTENDENCY (3). The basic performance patterns of the superintendent and central office personnel in the organization and administration of the educational process. PRQ: Minimum of 24 semester hours in educational administration at the 600 level or consent of department.

LEEA 615. EDUCATIONAL FACILITIES (3). Educational facilities planning, facilities survey, population and utilization studies, and evaluation of existing facilities. Laboratory and field base clinical experiences are included. PRQ: LEEA 500 or consent of department.
LEEA 620. EDUCATION FINANCE II (3). Theoretical aspects of financial administration, state and local tax systems, cost-quality relationships, and operational finance. PRQ: LEEA 520 or consent of department.

LEEA 625. EDUCATION LAW II (3). Emphasis on case studies in education law. Clinical experiences are included. PRQ: LEEA 525 or consent of department.

LEEA 630. EDUCATIONAL ADMINISTRATION FIELD STUDIES (3). Methods of administrative planning in the areas of community background, evaluation and development of facilities, transportation, scheduling, utilization of staff, and financial analysis. Clinical experiences are included. PRQ: Consent of department.

LEEA 635. ADMINISTRATION AND SUPERVISION OF EDUCATIONAL PERSONNEL (3). The problems and issues associated with administration and supervision of educational personnel. Organization of personnel, collective negotiations, selection of personnel, and development of reward systems. Clinical experiences are included. PRQ: CISC 535 or LEEA 535X, or consent of department.

LEEA 636. COLLECTIVE BARGAINING IN EDUCATION (3). An educational administration perspective on basic processes of collective bargaining in educational settings. Consideration is given to history, theory, specific collective bargaining issues, planning, communication, and strategies required in the bargaining process. Clinical experiences are included. PRQ: LEEA 635 or consent of department.

LEEA 637. SEMINAR: MANAGEMENT OF NEGOTIATED CONTRACTS IN EDUCATION (3). A seminar for present and prospective educational administrators. Study and exploration of effective strategies for implementation, resolution, and management of negotiated contracts. Clinical experiences are included. PRQ: LEEA 636 or consent of department.

LEEA 640. SEMINAR IN SCHOOL-COMMUNITY RELATIONS (3). Current problems and issues as they affect administrative practices; emphasis on field-based practices and techniques. PRQ: LEEA 540 or consent of department.

LEEA 645. SURVEY OF RESEARCH IN EDUCATIONAL ADMINISTRATION (3). Survey of selected research studies in educational organization and administration. PRQ: LEEA 500 or consent of department.

LEEA 650. SEMINAR: EDUCATIONAL ADMINISTRATION (3). The identification and integration of the human and technical skills required for modern educational administration. May be repeated to a maximum of 6 semester hours. PRQ: LEEA 600 or consent of department.

LEEA 651. EXTERNSHIP IN EDUCATIONAL ADMINISTRATION (3). Designed expressly for practicing educational administrators and business managers and directly concerned with applied problems in educational administration and business management. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

LEEA 654. THE POLITICS OF EDUCATIONAL ADMINISTRATION (3). Emphasis on the distinct nature of philosophic inquiry functioning within a sociocultural setting in the construction of educational theory.

LEEA 655. PLANNING AND DECISION MAKING IN EDUCATIONAL ADMINISTRATION (3). Extended study of decision making in education focusing on specific problems in planning, design, implementation, and evaluation. Emphasis on clinical experiences. PRQ: Completion of master's degree or equivalent and consent of department.

LEEA 670. THE ADMINISTRATION OF HIGHER EDUCATION (3). Various executive roles common to higher education administration. Decision theory, role analysis, accountability models, and principles of organizational behavior as applied to the administration of higher education institutions.

LEEA 671. LEGAL ASPECTS OF HIGHER EDUCATION ADMINISTRATION (3). Legal principles, legislation, and court rulings in such areas as employment, dismissal, contracts, tenure, civil rights, due process, student rights, and other issues of concern to higher education administrators.

LEEA 672. BUSINESS MANAGEMENT IN HIGHER EDUCATION (3). Analysis of issues and problems of business management in colleges and universities.

LEEA 680. CLINICAL LABORATORY, DISTRICT-LEVEL ADMINISTRATION (1). Laboratory-based clinical experiences including individual and group classroom exercises and simulations focused on district-level administrative tasks and functions. Required for superintendent's endorsement. PRQ: LEEA 600 and LEEA 610, or consent of department.

LEEA 686. INTERNSHIP IN EDUCATIONAL ADMINISTRATION (3-12). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. Minimum of 3 semester hours required for superintendent endorsement. May be repeated to a maximum of 12 semester hours, although typically only 3 semester hours may be applied to the program of study. PRQ: LEEA 610 or consent of department.

LEEA 697. INDEPENDENT RESEARCH IN EDUCATIONAL ADMINISTRATION (1-3). Independent research at post-master's degree levels under faculty supervision. May be repeated to a maximum of 6 semester hours.

LEEA 698. RESEARCH SEMINAR IN EDUCATIONAL ADMINISTRATION (3). Designed for the advanced student interested in planning and conducting research studies in educational administration. Research project may be an exploratory or pilot study related to the doctoral dissertation. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: EPSY 620.

LEEA 699. DOCTORAL RESEARCH AND DISSERTATION (1-15). Student must accumulate 15 semester hours prior to graduation. May be repeated. PRQ: Candidacy for the doctoral degree and consent of chair of doctoral committee.

Foundations of Education (LEFE)

LEFE 462. SPECIAL TOPICS IN FOUNDATIONS OF EDUCATION (1-3). Study of special topics, announced in advance, in foundations of education. May be repeated to a maximum of 9 semester hours when subject varies.

LEFE 500. SOCIAL FOUNDATIONS OF EDUCATION (3). Social forces influencing American education; basic educational traditions as reflections of American culture, the school and cultural change; educational issues and the sources of conflict in American culture.

LEFE 501. RESEARCH METHODS IN THE PHILOSOPHICAL, HISTORICAL, AND SOCIAL FOUNDATIONS OF EDUCATION (3). Emphasizes interpretive, normative, and critical perspectives in planning, conducting, and writing research studies in education.

LEFE 510. PHILOSOPHICAL FOUNDATIONS OF EDUCATION (3). Emphasis on the distinct nature of philosophic inquiry functioning within a sociocultural setting in the construction of educational theory.

LEFE 511. PHILOSOPHICAL ANALYSIS OF CURRENT EDUCATIONAL THOUGHT (3). Philosophical methods used in analyzing, refining, and criticizing educational theory and ideology in a multicultural society.

LEFE 520. HISTORICAL FOUNDATIONS OF EDUCATION (3). The history of education in Western society. Major educational figures, theories, institutions, and developments are emphasized and interpreted in their cultural contexts.

LEFE 521. HISTORICAL FOUNDATIONS OF AMERICAN EDUCATION (3). The history of education in the United States. The interrelationship of culture and educational figures, theory, and developments.

LEFE 525. HISTORY OF WOMEN'S EDUCATION IN AMERICA (3). A survey of women's education in the context of the main currents of American history. Educational leaders, theories, institutions, and developments are analyzed in multicultural contexts.

LEFE 530. INTRODUCTION TO COMPARATIVE/INTERNATIONAL EDUCATION (3). An introduction to the purpose, methodology, and research in comparative/international education. Special reference to understanding and comparing systems of education in selected nations.

LEFE 540. SOCIOCULTURAL AND PSYCHOLOGICAL FOUNDATIONS OF PEACE EDUCATION (3). Social and psychological forces which influence human relationships and have implications for education for peace and the diminution of forces of aggression, fear, hostility, and violence.

LEFE 541. THE SCHOOL AS AN INSTRUMENT FOR PEACE (3). The role and responsibilities of the school in educating for peace. Instructional strategies and resources.
LEFE 586. INTERNSHIP IN EDUCATIONAL FOUNDATIONS (1-9). Students learn to apply foundations principles in a practical setting. Instruction supervised by a foundation education professor. May be repeated to a maximum of 9 semester hours.

LEFE 590. WORKSHOP IN EDUCATION (1-3). Workshop designed for teachers, supervisors, counselors, and administrators to study contemporary issues and problems of the public school. Content varies to provide different opportunities to study current problems. May be repeated to a maximum of 12 semester hours. PRQ: Acceptance by the director of the workshop.

LEFE 597. INDEPENDENT RESEARCH IN FOUNDATIONS OF EDUCATION (1-3). Independent research at the master's degree level under faculty supervision. May be repeated to a maximum of 3 semester hours. PRQ: Admission to master's degree program and consent of faculty member who will direct research.

LEFE 599. MASTER'S THESIS (1-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. Students must accumulate a minimum of 3 semester hours prior to graduation. PRQ: Consent of department. Recommended: EPSY 520.

LEFE 603. FOUNDATIONS OF FEMINIST EDUCATIONAL THOUGHT (3). The study of feminist educational scholarship with emphasis on epistemological, ethical, and critical arguments. Considers the respective implications of theories for women's professional education and development.

LEFE 610. SEMINAR IN PHILOSOPHICAL INVESTIGATION (2-3). Philosophic exploration of various educational doctrines and theories operating in a sociocultural context. May be repeated to a maximum of 6 semester hours.

LEFE 612. ETHICS AND EDUCATION (3). The study of educational policy and pedagogy from the perspective of theories in ethics. Critical analysis of the relationship of education to philosophic discussions of pertinent ethical issues related to education in a multicultural society.

LEFE 615. FOUNDATIONS OF EDUCATIONAL POLICY (3). A critical analysis of the generation, implementation, and outcomes of educational economics and history will be used to investigate the dynamics of policy formation and the relationship between educational policy and social trends.

LEFE 620. SEMINAR IN EUROPEAN EDUCATIONAL THOUGHT (3). European educational theories that have influenced Western culture. Educational ideas of selected theorists examined in their cultural contexts.

LEFE 621. SEMINAR IN AMERICAN EDUCATIONAL THOUGHT (3). Individuals, theories, and developments in American educational history examined in their historical, philosophical, social, and cultural contexts through discussion and research. PRQ: Admission to Ed.S. or doctoral program, or consent of department.


LEFE 623. HISTORY OF HIGHER EDUCATION (3). Critical analysis and interpretation of historical developments in American higher education from the colonial to modern periods. Emphasis on key institutions, episodes, people, and social trends illustrating the continuities, complexities, and changes in community colleges, colleges, and universities.

LEFE 630. SEMINAR IN COMPARATIVE/INTERNATIONAL EDUCATION (3). Advanced cross-cultural comparisons of educational systems in order to understand and compare international features in education. A detailed multifactor analysis of the educational systems under investigation.

LEFE 640. SEMINAR IN PROFESSIONAL EDUCATIONAL ORGANIZATIONS (1-3). Case studies of educational organizations, their history, purposes, and functions. Appraisal of the impact of these groups on past, present, and future educational trends. May be repeated to a maximum of 3 semester hours.

LEFE 686. SEMINAR IN PHILOSOPHICAL INVESTIGATION (2-3). Philosophic exploration of various educational doctrines and theories operating in a sociocultural context. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: EPSY 520.

LEFE 502. DESCRIPTIVE CATALOGING (2). Fundamentals of descriptive cataloging according to AACR2 and MARC standards; laboratory practice with OCLC.

LEFE 503. INTRODUCTION TO INFORMATION SCIENCE (3). Study of communication theory, information storage and retrieval systems, and standards for information representation; analysis of manual and machine capabilities for processing information.

LEFE 505. LIBRARY ORGANIZATION AND MANAGEMENT (3). Organization and management of libraries, with emphasis on theories, principles, and problems of governance, planning, staffing, communication, decision making, control, evaluation, information policy, and networking.

LEFE 507. COLLECTION DEVELOPMENT (3). Principles of building and maintaining library collections; current and retrospective selection aids, including national and trade bibliographies; current and issues in intellectual freedom.

LEFE 508. REFERENCE THEORY AND PRACTICE (3). Evaluation and use of basic reference materials and information resources in various types of libraries; introduction to the theory and practice of professional reference services including the reference interview and online and CD-ROM searching.

LEFE 510. INSTRUCTIONAL MEDIA AND TECHNOLOGY (3). Overview of theoretical issues and trends in instructional technology and their impact on the effective selection, design, utilization, and evaluation of instructional media.

LEFE 511. ADVANCED INSTRUCTIONAL MEDIA DESIGN (3). Advanced design of mediated instruction, script writing, photography, audio and video production, and computer presentation systems. Recommended: LEFE 510.

LEFE 523. MEDIA FOR YOUNG ADULTS (3). Evaluation and selection of books and nonprint materials appropriate for middle school/junior high and high school students (ages 12-19 years); emphasis on uses of current media to meet students' needs, interests, and learning styles.

LEFE 525. READING INTERESTS OF ADULTS (3). Exploration of reading interests of adults, including demographic aspects; popular nonfiction and fiction (bestsellers, genre fiction) books and periodicals; media tie-ins; reading promotion and readers advisory services in libraries.

LEFE 527. LIBRARY MATERIALS FOR CHILDREN (3). Evaluation, selection, and uses of fiction and nonfiction (both print and nonprint) to meet the needs, interests, and learning abilities of children (ages preschool to 13 years): emphasis on whole language and curriculum integration.

LEFE 529. THEORIES OF COMPUTER-BASED EDUCATION (3). Emerging theories and models relating to computer-assisted instruction (CAI), computer-based training, computer literacy, and other uses of computers as instructional media. Topics include intelligent CAI, expert systems, implementation models, and simulation and gaming. PRQ: EPSY 429 (LEIT 429X) or consent of department.

Instructional Technology (LEIT)

LEIT 429X. COMPUTERS IN CLASSROOM TEACHING (3). EPSY 429. A survey of educational uses of computers. Emphasis on the role of computers in the educational environment, hardware, review and evaluation of available educational software, software applications, and technology implementation. No previous experience with computers required. Designed for students entering an educational environment. Not open to students with previous experience in data processing or information systems without permission of their major department.

LEIT 430. SURVEY OF INSTRUCTIONAL TECHNOLOGY (3). Selection, production, utilization, and evaluation of instructional media.

LEIT 439. DEVELOPING EDUCATIONAL SOFTWARE FOR COMPUTERS (3). Design and develop educational software for computers. Provides experience with design methodologies for educational software and authoring systems commonly used in education. PRQ: EPSY 429 (LEIT 429X) or consent of department.

LEIT 450. INSTRUCTIONAL TELEVISION I (3). Crosslisted as COMS 450X. Practical methods for the use of television in educational settings. Studio experience in the preparation and presentation of televised instructional units. Not open to students with credit in COMS 357 or COMS 358 or equivalent.

LEIT 455. MEDIA DESIGN TECHNIQUES (3). Designing presentations for instruction. Emphasis on basic design, writing, and photographic techniques. PRQ: LEIT 430 or consent of department.

LEIT 502. DESCRIPTIVE CATALOGING (2). Fundamentals of descriptive cataloging according to AACR2 and MARC standards; laboratory practice with OCLC.

LEIT 503. INTRODUCTION TO INFORMATION SCIENCE (3). Study of communication theory, information storage and retrieval systems, and standards for information representation; analysis of manual and machine capabilities for processing information.

LEIT 505. LIBRARY ORGANIZATION AND MANAGEMENT (3). Organization and management of libraries, with emphasis on theories, principles, and problems of governance, planning, staffing, communication, decision making, control, evaluation, information policy, and networking.

LEIT 507. COLLECTION DEVELOPMENT (3). Principles of building and maintaining library collections; current and retrospective selection aids, including national and trade bibliographies; current and issues in intellectual freedom.

LEIT 508. REFERENCE THEORY AND PRACTICE (3). Evaluation and use of basic reference materials and information resources in various types of libraries; introduction to the theory and practice of professional reference services including the reference interview and online and CD-ROM searching.

LEIT 510. INSTRUCTIONAL MEDIA AND TECHNOLOGY (3). Overview of theoretical issues and trends in instructional technology and their impact on the effective selection, design, utilization, and evaluation of instructional media.

LEIT 511. ADVANCED INSTRUCTIONAL MEDIA DESIGN (3). Advanced design of mediated instruction, script writing, photography, audio and video production, and computer presentation systems. Recommended: LEIT 510.

LEIT 523. MEDIA FOR YOUNG ADULTS (3). Evaluation and selection of books and nonprint materials appropriate for middle school/junior high and high school students (ages 12-19 years); emphasis on uses of current media to meet students' needs, interests, and learning styles.

LEIT 525. READING INTERESTS OF ADULTS (3). Exploration of reading interests of adults, including demographic aspects; popular nonfiction and fiction (bestsellers, genre fiction) books and periodicals; media tie-ins; reading promotion and readers advisory services in libraries.

LEIT 527. LIBRARY MATERIALS FOR CHILDREN (3). Evaluation, selection, and uses of fiction and nonfiction (both print and nonprint) to meet the needs, interests, and learning abilities of children (ages preschool to 13 years): emphasis on whole language and curriculum integration.

LEIT 529. THEORIES OF COMPUTER-BASED EDUCATION (3). Emerging theories and models relating to computer-assisted instruction (CAI), computer-based training, computer literacy, and other uses of computers as instructional media. Topics include intelligent CAI, expert systems, implementation models, and simulation and gaming. PRQ: EPSY 429 (LEIT 429X) or consent of department.
LEIT 531. VISUAL LITERACY (3). An exploration of the historical background, conceptual base, and research involved in visual literacy. Reviews the use and design of various instructional media communications and develops understanding of the interpretation and creation of visual images in education.

LEIT 533. SCHOOL LIBRARY MEDIA CENTERS (3). Philosophy, functions, objectives, and current methods of developing curriculum-integrated media programs in elementary and secondary schools.

LEIT 535. DISTANCE EDUCATION: DESIGN AND DELIVERY (3). Evaluation and design of various types of distance delivery systems including video/audio, telecommunications, and computer networks, with emphasis on the supportive roles of instructional media and instructional design. Theoretical and practical applications of distance delivery.

LEIT 539. COURSEWARE SYSTEMS DEVELOPMENT FOR MICROCOMPUTERS (3). Advanced design techniques for developing educational software. A systems approach will be applied to topics such as graphics, file management, simulation design, and video interfacing. PRQ: LEIT 439 or consent of department.

LEIT 540. SEMINAR IN LIBRARY/INFORMATION STUDIES (1-6). Specific content varies. Representative topics include current trends or issues, storytelling, international and comparative librarianship, and services to special populations. A maximum of 6 semester hours may be applied toward the master's degree.

LEIT 541. LIBRARY SERVICES FOR CHILDREN (3). Objectives, planning, organization, and evaluation of programs and services for children in school and public libraries.

LEIT 542. ACADEMIC LIBRARIES (3). History and analysis of community college, college, university, and research libraries; emphasis on current standards, services, and developments within the academic community.

LEIT 543. LIBRARY SERVICES FOR ADULTS (3). Analysis of library and information needs of adults and young adults in various communities and settings; planning, organization, and evaluation of library resources and services for individuals and for groups; emphasis on community analysis and library services to special groups.

LEIT 544. CATALOGING NONBOOK MATERIAL (3). Descriptive cataloging of nonbook material, according to current AACR2 and MARC practice; may include: film and video, pictures, sound recordings, microcomputer software, games, and kits.

LEIT 545. MARKETING AND PUBLIC RELATIONS FOR LIBRARIES (3). Examination of the components and principles of marketing and public relations in libraries, as nonprofit organizations, the planning, establishing, maintaining, and evaluating of marketing/PR for libraries; various promotion/publicity techniques appropriate for libraries.

LEIT 546. LIBRARY CLASSIFICATION (2-3).
   A. Dewey Decimal Classification (2)
   B. Library of Congress Classification (3)
History of and practice with a major American library classification; includes the principles underlying the classification. Both courses may be taken. PRQ: LEIT 502 or consent of department.

LEIT 548. INDEXING AND ABSTRACTING (3). Principles and procedures for indexing and abstracting; experience with manual and machine methods for indexing and abstracting.

LEIT 549. ONLINE SEARCHING (3). Translation of reference questions into formal search statements; laboratory practice in online access to information; emphasis on online databases and the Internet.

LEIT 550. ROLES OF THE INSTRUCTIONAL TECHNOLOGIST (3). The various roles of instructional technologists in both school and nonschool environments; to include field trips.

LEIT 551. INSTRUCTIONAL TECHNOLOGY FOR THE FUTURE (3). Planning for educational technologies and futures; educational forecasting strategies; new and potential instructional media or processes; and educational models based on low and/or high technology. PRQ: Consent of department.

LEIT 552. INSTRUCTIONAL TECHNOLOGY FOR DIVERSE CULTURES (3). Development, utilization, and evaluation of instructional media for varied cultures and countries. Topics include appropriateness of standard instructional media for diverse audiences, creation of media for instructional environments with localized requirements, and evaluation of innovative teaching technologies for multithnic and multicultural learners. PRQ: Consent of department.

LEIT 553. TECHNICAL SERVICES (3). Introduction to organization and administration of acquisition, serials, cataloging, and circulation in all types of libraries; preservation of library materials.

LEIT 554. REFERENCE SERVICES (3). Reference function and process in terms of current developments and user needs; planning, managing, and evaluating reference services in all types of libraries and information centers; emphasis on topics in interpersonal communication, bibliographic instruction, career development, and lifelong learning. PRQ: LEIT 508 or consent of department.

LEIT 555. MEDIA DESIGN: MULTI-MEDIA (3). Designing presentations of instruction. Utilization of 35mm and multiscan format. PRQ: LEIT 455 or consent of department.

LEIT 556. MEDIA DESIGN—AUDIO MATERIALS (3). Designing presentations including various forms of instruction. Emphasis on audio format. PRQ: LEIT 455 or consent of department.

LEIT 558. INSTRUCTIONAL TELEVISION II (3). Crosslisted as COMS 559X. Application of television production techniques to instructional activities. PRQ: LEIT 450 or consent of department.

LEIT 559. INSTRUCTIONAL DESIGN I (3). The systematic design of instructional materials. Students will design a blueprint for an instructional module by applying an instructional design model. PRQ: LEIT 430 or consent of department.

LEIT 560. INSTRUCTIONAL DESIGN II (3). Students will develop an instructional module using systematic development models and established principles of instructional design. PRQ: LEIT 560 or consent of department.

LEIT 561. INSTRUCTIONAL TELEVISION I (3). Crosslisted as COMS 562X. Design and development of television programs for education and corporate environments. PRQ: Consent of department.

LEIT 562. TRAINING AND PERFORMANCE TECHNOLOGY (3). Analysis of educational training problems. By conducting an instructional needs assessment and performance audit, students will plan solutions to training problems including various forms of training, job aids, and non-training recommendations. PRQ: LEIT 560 or consent of department.

LEIT 563. LEADERSHIP AND EDUCATIONAL POLICY STUDIES (3). Development, utilization, and evaluation of instructional media for diverse audiences, creation of media for instructional environments with localized requirements, and evaluation of innovative teaching technologies for multithnic and multicultural learners. PRQ: Consent of department.

LEIT 564. LIBRARY AUTOMATION (3). Survey of the automation of library operations and the introduction of new technologies; data processing concepts and planning for automation; study of current library systems.

LEIT 565. HUMAN RESOURCE DEVELOPMENT (3). LEAC 561. The nature and function of programs for developing human resources in business, education, industry, government, social services, and voluntary organizations.

LEIT 566. INSTRUCTIONAL TECHNOLOGY FACILITIES (3). Design and establishment of instructional technology centers and programs in education, business and industry.

LEIT 567. INSTRUCTIONAL TECHNOLOGY PROMOTION AND DEVELOPMENT (3). Theories and methods for creating efficient and effective instructional technology centers and programs in education, business and industry.

LEIT 568. INSTRUCTIONAL TECHNOLOGY ADMINISTRATION (3). Management of instructional technology services. PRQ: LEIT 430 or consent of department.

LEIT 569. INSTRUCTIONAL TECHNOLOGY PROMOTION AND DEVELOPMENT (3). Theories and methods for creating efficient and effective instructional technology centers and programs in education, business and industry.

LEIT 570. INSTRUCTIONAL TECHNOLOGY FACILITIES (3). Design and construction of instructional technology facilities.

LEIT 571. INSTRUCTIONAL DESIGN I (3). The systematic design of instructional materials. Students will design a blueprint for an instructional module by applying an instructional design model. PRQ: LEIT 500 and either LEIT 562 or LEIT 564, or consent of department.

LEIT 572. INSTRUCTIONAL TECHNOLOGY ADMINISTRATION (3). Management of instructional technology services. PRQ: LEIT 430 or consent of department.

LEIT 573. INSTRUCTIONAL TECHNOLOGY FACILITIES (3). Design and construction of instructional technology facilities.

LEIT 574. INSTRUCTIONAL COMPUTER APPLICATIONS (3). Survey of the automation of library operations and the introduction of new technologies; data processing concepts and planning for automation; study of current library systems.

LEIT 575. INSTRUCTIONAL DESIGN I (3). The systematic design of instructional materials. Students will design a blueprint for an instructional module by applying an instructional design model. PRQ: LEIT 500 and either LEIT 562 or LEIT 564, or consent of department.

LEIT 576. INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY (3-15). Work in a practical situation under the guidance of a staff member from that setting and a university supervisor. May be repeated to a maximum of 15 semester hours, although typically only 3 semester hours may be applied to the program of study.

LEIT 577. WORKSHOP IN INSTRUCTIONAL TECHNOLOGY (1-3). The study of current issues related to media. May be repeated to a maximum of 12 semester hours.

LEIT 578. SPECIAL TOPICS IN INSTRUCTIONAL TECHNOLOGY (1-3). Study of special topics, announced in advance, in instructional technology. May be repeated to a maximum of 9 semester hours when topic varies.
LEIT 599. MASTER'S THESIS (3-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of faculty member who will direct research.

LEIT 615X. STRATEGIC HUMAN RESOURCE DEVELOPMENT (3). LEAC 615. Advanced study emphasizing complex skills, concepts, and strategies relating to the adult teaching/learning component of human resource development in business, industry, government, and voluntary organizations.

LEIT 640. SEMINAR: INSTRUCTIONAL TECHNOLOGY CURRICULA (3). Development of courses and programs at the college level.

LEIT 641. SEMINAR: INSTRUCTIONAL TECHNOLOGY THEORY (3). Applying concepts of educational communication, models, and theories to problem solving, attitude formation, and teaching.

LEIT 642. SEMINAR: INSTRUCTIONAL TECHNOLOGY RESEARCH (3). Research in organization, administration, and application of instructional technology.

LEIT 643. SEMINAR: INSTRUCTIONAL TECHNOLOGY PROBLEMS (3). The problems involved in the administration of instructional technology programs and services at all levels, and in areas such as finance, management of personnel, and facilities.

LEIT 655. MEDIA DESIGN PROJECT (3). Designing presentations for instruction with emphasis on individual student project. May be repeated to a maximum of 9 semester hours.

LEIT 670. PRACTICUM: INSTRUCTIONAL TECHNOLOGY (3). Instructional media administration techniques in an applied setting. May be repeated to a maximum of 6 semester hours.

LEIT 686. INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY (3-15). Work in a practical situation under the guidance of a staff member from that setting and a university supervisor. May be repeated to a maximum of 15 semester hours, although typically only 3 semester hours may be applied to the program of study. PRQ: Admission to doctoral program, or consent of department.

LEIT 697. INDEPENDENT RESEARCH IN INSTRUCTIONAL TECHNOLOGY (1-3). Independent research at post master's degree levels under faculty supervision. May be repeated to a maximum of 6 semester hours. PRQ: Consent of faculty member who will direct research.

LEIT 698. RESEARCH SEMINAR IN INSTRUCTIONAL TECHNOLOGY (1-3). Designed for the advanced student interested in planning and conducting research studies in instructional technology. Research project may be an exploratory or pilot study related to the doctoral dissertation. May be repeated to a maximum of 6 semester hours.

LEIT 699. DOCTORAL RESEARCH AND DISSERTATION (1-15). May be repeated. Student must accumulate 15 semester hours prior to graduation. PRQ: Candidacy for the doctoral degree and consent of chair of doctoral committee.

School Business Management (LEBM)

LEBM 501. SCHOOL BUSINESS MANAGEMENT (3). A summary of task areas such as management of auxiliary enterprises including accounting and financial control, maintenance of buildings and grounds, personnel and office management, transportation, insurance, investments, administration of supplies and equipment, and administrative relationships.

LEBM 511. PRACTICUM IN SCHOOL BUSINESS MANAGEMENT (1-6). A program designed to provide maximum experience with practitioners in the field. All phases of business management will be considered, and time will be provided for field experiences. May be repeated to a maximum of 6 semester hours. PRQ: LEBM 501, LEBM 521, and LEEA 520, or consent of department.

LEBM 521. ACCOUNTING, STATEMENT ANALYSIS, AND BUDGETING (3). Principles of school fund accounting including a study of budgeting, payroll administration, bonded indebtedness, accounting for receipts and expenditures, extracurricular funds and analysis of statements, and auxiliary enterprises such as cafeteria and store. PRQ: LEEA 500 and LEBM 501, or consent of department.

LEBM 530. MANAGEMENT OF BUSINESS SUPPORT SERVICES (3). Principles and procedures of purchasing, property accounting, risk management, food service programs, transportation, and school store operation. PRQ: LEEA 500, LEEA 520, LEBM 501, and LEBM 521, or consent of department.

LEBM 540. PERSONNEL AND FACILITIES MANAGEMENT (3). The problems and issues associated with managing personnel and operating and maintaining school sites and facilities: all aspects of the business office, noncertified staff, and legal and insurance problems. PRQ: LEEA 500 and LEBM 501 or consent of department.

LEBM 550. FINANCIAL PLANNING AND SCHOOL BUDGETING (3). Techniques and methods of estimating local, state, and federal revenues; alternative methods of school budget planning and control; and cost analysis. PRQ: LEEA 500, LEEA 520, LEBM 501, and LEBM 521, or consent of department.

LEBM 586. INTERNSHIP IN SCHOOL BUSINESS MANAGEMENT (1-12). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 12 semester hours, although typically only 6 semester hours may be applied to the program of study. LEBM 586 is ordinarily to be taken 2 semester hours per term for three consecutive terms for a total of 6 semester hours. PRQ: LEEA 500, LEEA 520, LEBM 501, and LEBM 521, or consent of department.

LEBM 590. WORKSHOP IN SCHOOL BUSINESS MANAGEMENT (1-3). Workshop designed for teachers, supervisors, counselors, and administrators to study contemporary issues and problems of the public schools. Content varies to provide the opportunity to study current problems. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

LEBM 592. SPECIAL TOPICS IN SCHOOL BUSINESS MANAGEMENT (1-3). Study of special topics, announced in advance, in school business management. May be repeated to a maximum of 9 semester hours when topic varies.

LEBM 597. INDEPENDENT RESEARCH IN SCHOOL BUSINESS MANAGEMENT (1-3). Independent research at the master's degree level under faculty supervision. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

LEBM 599. MASTER'S THESIS (3-6). Open only to the student who elects to write a thesis for the M.S.Ed. degree. The student enrolls with the faculty member directing the thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: EPSY 520.

LEBM 610. SEMINAR IN SCHOOL BUSINESS MANAGEMENT (3). The problems involved in the business administration of schools. Concentrated study and research concerned with all phases of school business management, such as accounting and finance, cafeteria management, purchasing, transportation, building planning and construction. PRQ: Consent of department.

LEBM 621. ADVANCED SCHOOL FUND ACCOUNTING AND BUDGETING (3). The application of data processing systems to school fund accounting, payroll, inventories, curriculum, personnel, registration procedures, budget, textbook accounting, and other business office functions. PRQ: LEEA 500, LEEA 520, LEBM 501, and LEBM 521, or consent of department.

LEBM 686. INTERNSHIP IN SCHOOL BUSINESS MANAGEMENT (3-12). Work individually or in small groups in a practical situation under the guidance of a staff member of that setting and a university supervisor. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

LEBM 687. INDEPENDENT RESEARCH IN SCHOOL BUSINESS MANAGEMENT (1-3). Independent research at post master's degree levels under faculty supervision. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.
Department of Physical Education (PHED)

Chair: Judith A. Bischoff

Graduate Faculty

Thomas E. Ball, associate professor, Ph.D., University of Illinois
Judith A. Bischoff, professor, Ph.D., University of Michigan
Charles Carter, assistant professor, Ed.D., West Virginia University
Rodney Caughron, assistant professor, Ph.D., University of Iowa
Jerald D. Floyd, professor, Ed.D., University of Utah
Constance Fox, associate professor, Ed.D., University of Georgia
Ciersida Garcia, associate professor, Ph.D., Michigan State University
Luis E. Garcia, assistant professor, Ph.D., Michigan State University
Danielle M. Jay, associate professor, Ph.D., Texas Woman's University
George Kelley, assistant professor, D.A., Middle Tennessee State University
Daniel Klein, associate professor, Ph.D., Southern Illinois University
Keith W. Lambrecht, associate professor, Ph.D., Oregon State University
Marilyn A. Looney, associate professor, P.E.D., Indiana University
Pamela Macfarlane, associate professor, Ph.D., University of Iowa
James R. Marett, associate professor, Ph.D., Arizona State University
David C. Mason, associate professor, Ph.D., University of Illinois
Peggy Pedersen, assistant professor, Ph.D., Oregon State University
Tracy Pellet, assistant professor, Ed.D., Brigham Young University
Sharon A. Plowman, professor, Ph.D., University of Illinois
James H. Rimmer, professor, Ph.D., Texas Woman's University
Janet A. Rintala, associate professor, Ph.D., University of Iowa
Gretchen Schlabach, associate professor, Ph.D., University of Maryland
Yoshiaki Takei, professor, Ph.D., University of Southern California
Lavon Williams, assistant professor, Ph.D., University of North Carolina at Greensboro
Laurice Zittel, assistant professor, Ph.D., Oregon State University

The Department of Physical Education offers the degree Master of Science in Education. A Graduate Studies Handbook is available in the Department of Physical Education Office in Anderson Hall.

Master of Science in Education in Physical Education

Admission

To be considered for admission to the M.S.Ed. program in physical education, an applicant is expected to have a baccalaureate degree which included courses in physical education, health, recreation, dance, or equivalent courses. When these courses are lacking, a student normally will be required to make up deficiencies. It is expected that students will have had some undergraduate course work in science areas including anatomy, kinesiology, and physiology, and in motor performance activities. However, a student may be admitted to the program contingent on the successful completion of undergraduate deficiencies as determined by the department in accordance with the student's professional objectives.

Applicants to the master's degree program in physical education are normally notified of an admission decision as soon as administratively feasible following receipt of all credentials to complete the applicant's file by the Graduate School.

Retention

Any undergraduate deficiencies, as determined by the department, must be removed before completion of 15 semester hours of graduate study. Students who violate the standards of the profession may be eliminated from the program after review by a properly constituted committee of the graduate faculty.

Requirements

The student must successfully complete a minimum of 21 semester hours of graduate credit in the department. Nine semester hours of graduate credit in courses related to the student's degree objectives may be taken outside the Department of Physical Education.

In consultation with the adviser, students will select a minimum of 9 semester hours in one of the following areas of interest: administration, curriculum, sport biomechanics, coaching, health education, motor learning/motor development, sociocultural aspects (including the history, philosophy, psychology, and sociology of physical education), or psychology of sport and exercise. Requirements for those interested in adapted physical education, exercise physiology/fitness leadership, or sport management are listed under those specialties.

Students are required to complete successfully a comprehensive examination in accordance with established university and department policies.

In pursuing the degree a student must choose the thesis (30) or the non-thesis (33) option.

PHED 552, Methods of Research in Physical Education (3)
PHED 545, Evaluation in Physical Education (3) (non-thesis option), OR PHED 645, Application of Statistics to Research in Physical Education (3) (thesis or non-thesis option)
One of the following (3-4)
PHED 452, Applied Physiology of Exercise (4)
PHED 514, Neuromuscular Aspects of Physical Performance (3)
PHED 535, Mechanical Analysis of Motor Skills (3)
PHED 635, Biomechanics (3)
PHED 652, Exercise Bioenergetics (3)
PHED 653, Cardiac Rehabilitation (3)
PHED 686, Seminar in Motor Learning (3)
One of the following (3)
PHED 507, History of Physical Education (3)
PHED 509, Philosophy of Physical Education (3)
PHED 582, Psychology of Sport and Exercise (3)
PHED 583, Psychology of Coaching (3)
PHED 586, Sport in Society (3)

A minimum of 9 semester hours in an area of interest selected in consultation with an adviser (9)
This specialization is designed to prepare teachers to deliver physical education including teaching, assessment, IEP development, consulting, program planning, and research. Certified physical education teachers completing this specialization meet Illinois State Board of Education available adapted physical education instructor for handicapped students.

Students selecting this specialization must choose either the thesis (30) or non-thesis (33) option; graduate assistants are expected to complete the thesis option. PHED 490, Adapted Physical Education, or equivalent, is a prerequisite for this specialization.

PHED 552, Methods of Research in Physical Education (3)
PHED 545, Evaluation in Physical Education (3) (non-thesis option), OR PHED 645, Application of Statistics to Research in Physical Education (3) (thesis or non-thesis option)
PHED 578, Seminar in Motor Development (3)
PHED 589, Inclusive Strategies for Special Populations: Theory and Practice (3)
PHED 590, Physical Education for Individuals with Physical and Sensory Disorders (3)
PHED 591, Assessment and Program Planning in Adapted Physical Education (3)
At least one of the following (3-4)
PHED 452, Applied Physiology of Exercise (4)
PHED 514, Neuromuscular Aspects of Physical Performance (3)
PHED 535, Mechanical Analysis of Motor Skills (3)
PHED 635, Biomechanics (3)
PHED 652, Exercise Bioenergetics (3)
PHED 653, Cardiac Rehabilitation (3)
PHED 666, Seminar in Motor Learning (3)
At least one of the following (3)
PHED 507, History of Physical Education (3)
PHED 509, Philosophy of Physical Education (3)
PHED 582, Psychology of Sport and Exercise (3)
PHED 583, Psychology of Coaching (3)
PHED 586, Sport in Society (3)

Thesis Option (6)
PHED 599A, Master's Thesis (6)

Non-Thesis Option (9)
Course work selected in consultation with the assigned graduate program adviser (9)

Specialization in Exercise Physiology/Fitness Leadership

This specialization is designed to provide knowledge and skills to students in the area of exercise physiology and/or fitness leadership. Students with such a professional background are prepared to assume various roles related to exercise physiology: research, teaching, and fitness leadership in hospitals, corporations, and health clubs. There are both thesis (30 hours) and non-thesis (33 hours) options available. Graduate assistants are required to complete a thesis. Applied exercise physiology and a human anatomy and physiology course are prerequisites for this specialization.

PHED 514, Neuromuscular Aspects of Physical Performance (3)
PHED 552, Methods of Research in Physical Education (3)
PHED 545, Evaluation in Physical Education (3) (non-thesis option), OR PHED 645, Application of Statistics to Research in Physical Education (3) (thesis or non-thesis option)
PHED 652, Exercise Bioenergetics (3)
PHED 653, Cardiac Rehabilitation (3)
At least one of the following (3)
PHED 507, History of Physical Education (3)
PHED 509, Philosophy of Physical Education (3)
PHED 582, Psychology of Sport and Exercise (3)
PHED 583, Psychology of Coaching (3)
PHED 586, Sport in Society (3)

Thesis Option (12)
PHED 599A, Master's Thesis (6)
Course work selected in consultation with the assigned graduate program adviser (6)

Non-Thesis Option (15)
Course work selected in consultation with the assigned graduate program adviser (15)

Specialization in Sport Management

This specialization requires a minimum of 30 semester hours and is designed to prepare students for a management career in the sport industry. Students attain theoretical knowledge and practical skills in preparation for various sport managerial careers in intercollegiate and professional athletics, athletic and fitness clubs, equipment merchandising, and sport consulting. Students selecting this specialization may choose either the thesis or non-thesis option; graduate assistants are expected to complete the thesis option.

PHED 538, Managing the Sport Enterprise (3)
PHED 539, Sport and the Law (3)
PHED 542, Sport Promotions (3)
PHED 552, Methods of Research in Physical Education (3)
PHED 645, Application of Statistics to Research in Physical Education (3)
At least 3 semester hours from the following (3)
PHED 593, Practicum in Sport Management (3)
PHED 597M, Internship in Sport Management (1-6)
At least one of the following (3-4)
PHED 452, Applied Physiology of Exercise (4)
PHED 514, Neuromuscular Aspects of Physical Performance (3)
PHED 535, Mechanical Analysis of Motor Skills (3)
PHED 635, Biomechanics (3)
PHED 652, Exercise Bioenergetics (3)
PHED 653, Cardiac Rehabilitation (3)
PHED 666, Seminar in Motor Learning (3)
At least one of the following (3)
PHED 507, History of Physical Education (3)
PHED 509, Philosophy of Physical Education (3)
PHED 582, Psychology of Sport and Exercise (3)
PHED 583, Psychology of Coaching (3)
PHED 586, Sport in Society (3)

Six semester hours selected from the College of Business in consultation with the assigned graduate program adviser (6)

Thesis Option (6)
PHED 599A, Master's Thesis (6)

Non-Thesis Option (6)
Course work selected in consultation with the assigned graduate program adviser (6)
Secondary Certification Program in Physical Education

The physical education entitlement program is designed for students interested in teaching physical education in Grades 6 to 12. The student will plan a program of study in consultation with the adviser for teacher certification. Upon completion of physical education deficiencies, the physical education professional program, professional education requirements for secondary certification, and fulfillment of appropriate general education requirements, the student may be recommended for admission to teacher education.

Deficiencies in Undergraduate Work
Candidates for the M.S.Ed. degree and 6-12 teacher certification must show proficiency in the following courses, or their equivalent, through transcript evaluation.

BIOS 311, Functional Human Anatomy (4)
EPSY 331, Measurement of the Cognitive Domain for Physical Education (1)

PHED 252, Standard First Aid (2)
PHED 313, Kinesiology (3),
OR PHED 314, Applied Kinesiology (4)

PHED 446, Measurement and Evaluation in Physical Education School Settings (2)

PHED 452, Applied Physiology of Exercise (4)
PHED 490, Adapted Physical Education (3)
Minimum of 1 hour in each of the areas of fitness, dance, individual sports, and team sports (9)

Physical Education Professional Course Requirements
Minimum of 1 hour in each of the areas of fitness, dance, individual sports, and team sports

BIOS 311, Functional Human Anatomy (4)

PHED 343, Elementary School Physical Education/Methods and Field Experience (3)

One of the following (2)

PHED 351, Analysis and Teaching Strategies of Team Sports (2)

PHED 352, Analysis and Teaching Strategies of Individual Sports (2)

PHED 353, Analysis and Techniques of Teaching Dance (2)

PHED 354, Analysis and Techniques of Teaching Dance Fitness (2)

PHED 395, Methods of Teaching Physical Education (3)

PHED 397, Field Experience in the Middle School (2),
OR PHED 398, Field Experience in the Secondary School (2)

PHED 452, Applied Physiology of Exercise (4)

PHED 466, Principles of Motor Learning (3)

PHED 490, Adapted Physical Education (3)

PHED 545, Evaluation in Physical Education (3)

PHED 620, Seminar in Physical Education Curriculum (3)

Professional Education and General Education Requirements
Students seeking secondary teaching certification must contact the adviser for teacher certification regarding professional education and general education requirements.

Following completion of course work in the professional program in physical education, the professional education requirement, and general education requirement, students are eligible to attempt the Illinois Teacher Certification Examination. Students may earn the M.S.Ed. degree by completing the additional hours required for the degree (normally 9-18 semester hours).

Secondary Certification Program in Health Education

The health education entitlement program is designed for students interested in teaching health education. The student will plan a program of study in consultation with the director of health education. Upon completion of the 33 semester hours listed below, completion of the professional education requirement for secondary certification, and fulfillment of appropriate general education requirements, the student will have met the requirements for a 6-12 teaching certificate in health education. In addition to preparing the student for health education teaching positions in secondary schools, this program also can serve as a foundation for further academic work in school health services and instruction, and in maintenance of a healthful school environment.

PHED 490 and courses in anatomy/physiology and personal health are prerequisites for admission to the program.

Students who meet the criteria for admission to graduate study in the Department of Physical Education may earn the M.S.Ed. degree by completing the additional courses required for the degree (normally 12-15 semester hours). Students should consult with the director of graduate studies in the department.

PHHE 400, Methods and Materials in School Health Education (3)
PHHE 402, Community Health Programs and Issues (3)
PHHE 406, Human Sexuality (3),
OR PHHE 411, Sexuality Education (3)
PHHE 407, Drug Dynamics (3),
OR PHHE 409, Drug Education (3)

Two of the following

PHHE 401, Current Issues: Health Education (1-3)
PHHE 407, Drug Dynamics (3)
PHHE 408, Mental and Emotional Health (3)
PHHE 409, Drug Education (3)
PHHE 410, Death Education (3)

PHHE 411, Sexuality Education (3)

PHHE 412, Consumer Health (3)

PHHE 502, Curriculum Development in School Health Education (3)

PHHE 503, School Health Programs: Planning, Managing, and Evaluating (3)

PHHE 504, Special Topics in School Health Education (3)

PHHE 555, Clinical/Field Experience in School Health Education (3)

PHHE 671B, Directed Research in Health Education (3)

Course List

Physical Education (PHED)

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.

451. PHYSIOLOGY OF EXERCISE (3). Physiology of the skeletal, nervous, muscular, respiratory, cardiovascular, and endocrine systems, with emphasis on the effects of physical exercise. PRQ: BIOS 311 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 a result of training. Three hours per week of lecture plus arranged laboratory experience. PRQ: BIOS 311 or consent of department and successful completion of the PPST/Praxis I or the ICTS Basic Skills Test.
453. EXERCISE PROGRAMS FOR ADULT SPECIAL POPULATIONS (3). Examination of the 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: PHED 452 or consent of department.

454. EXERCISE GERONTOLOGY (3). Examination of the characteristics, physiological responses to exercise, 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 PHED 452, or consent of department.

458. STRESS TESTING (3). Theory, techniques, and procedures of graded exercise stress testing for diagnostic and functional assessment of individuals. PRQ: PHED 452 with a grade of C or better and consent of department.

459. PHYSICAL FITNESS PROGRAMMING (3). Development, organization, implementation, and administration of physical fitness programs. Includes field experience. PRQ: PHED 457 and PHED 458, or consent of department.

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.

490. ADAPTED PHYSICAL EDUCATION (3). Modification of physical education activities to meet the needs of persons with disabilities. Includes instructional strategies for properly integrating students with special needs into the regular physical education program and a clinical experience.

491. THERAPEUTIC EXERCISE (3). Principles and application of exercises for selected skeletal and muscular dysfunction. PRQ: BIOS 311 or consent of department.

507. HISTORY OF PHYSICAL EDUCATION (3). Historical background of physical education in relation to the cultural patterns of civilization and educational movements.

509. PHILOSOPHY OF PHYSICAL EDUCATION (3). Development of philosophical concepts paralleling educational philosophy. Current philosophical positions of physical educators with application to present day educational programs.

514. NEUROMUSCULAR ASPECTS OF PHYSICAL PERFORMANCE (3). Acute and chronic responses to short-term and intermittent physical activity, including prescription of resistance exercise. Focus on physiology of nervous and muscular systems. PRQ: PHED 452 or consent of department.

524. PREVENTION OF ATHLETIC INJURIES (3). Scientific approaches to the preventive aspects of trauma in athletics. PRQ: BIOS 311 or consent of department.

535. MECHANICAL ANALYSIS OF MOTOR SKILLS (3). An in-depth study of mechanical principles operative in the performance of motor skills. PRQ: PHED 313 or PHED 314, or consent of department.

538. MANAGING THE SPORT ENTERPRISE (3). Analysis of the sport industry with emphasis on the sport manager's role and functions. Concentration on planning, organizing, leading, and controlling functions as they apply to the sport manager. PRQ: Consent of department and a 3-semester-hour course in sport or physical education administration, management.

542. SPORT PROMOTIONS (3). A comprehensive study of promotions as they relate to the sport industry. Analysis of the activities designed to meet the needs and wants of sport consumers, which includes the promotion of sport services and products directly and indirectly to the sport consumer.

545. EVALUATION IN PHYSICAL EDUCATION (3). Application of measurement and evaluation theory to measures of human performance. Development of effective assessment programs for the more objective decision-making in physical education. PRQ: PHED 445 or consent of department.

549. INDEPENDENT STUDY IN PHYSICAL EDUCATION (1-3). Individual investigation of special problems, areas, or topics in physical education planned in consultation with a department adviser. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department following approval of written proposal.

552. METHODS OF RESEARCH IN PHYSICAL EDUCATION (3). Introduction to methods and techniques, research design and development, resources, and the research project. Each student will develop a research project or thesis prospectus.

555. CLINICAL EXPERIENCE IN EXERCISE GERONTOLOGY (1-3). Assessing, planning, implementing, and evaluating exercise programs for older adults. Includes a one hour per week lecture and a 30- or 60-hour practicum. PRQ: PHED 452 or consent of department.

565. SEMINAR IN CURRENT ISSUES IN PHYSICAL EDUCATION AND SPORT (3). A study of current issues and problems in physical education and sport through examination and critical analysis of recent literature and research findings.

566. PUBLIC RELATIONS FOR PHYSICAL EDUCATION (3). Purposes, materials, and methods relevant to keeping the public informed and interested in the various aspects of the physical education and athletic programs. A term project for a real or simulated situation will be produced.

568. PRINCIPLES OF SUPERVISION OF PHYSICAL EDUCATION (3). Techniques and procedures of supervision in physical education programs, including responsibilities of those involved in clinical and preclinical experiences.

569. INSTRUCTIONAL SKILLS FOR PHYSICAL EDUCATION (3). Teaching/learning process, developing/maintaining a productive learning environment, developing/analyzing content, and obtaining tools for the analysis of instruction.

575. SEMINAR IN MOVEMENT EDUCATION (3). Theories of movement education as the core of physical education. Designed for teachers of kindergarten through college, including classroom teachers and specialists in physical education. PRQ: PHED 342 or PHED 343, or consent of department.

576. SEMINAR IN ELEMENTARY SCHOOL PHYSICAL EDUCATION (3). Present-day programs and problems related to elementary school physical education.

577. PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL (3). Planning and conducting physical education experiences for children, derived from the study of human movement and developmental needs of children. Designed for graduate students seeking elementary certification.

578. SEMINAR IN MOTOR DEVELOPMENT (3). Survey of research on motor behavior and development with emphasis on findings pertaining to growth patterns, adaptability, and specificity. Factors influencing the development of motor abilities with implications for physical education.

582. PSYCHOLOGY OF SPORT AND EXERCISE (3). Investigation of psychological theory and methods relative to involvement in sport and exercise.

583. PSYCHOLOGY OF COACHING (3). The application of psychological principles of behavior to individuals and groups in competitive sports. Attention given to motivation and team compatibility.

586. SPORT IN SOCIETY (3). Sport and physical activity as a sociological phenomenon stressing the importance of various dimensions of sport and their social significance.

589. INCLUSION STRATEGIES FOR SPECIAL POPULATIONS: THEORY AND PRACTICE (3). Examination of factors, including litigation, legislation, and societal attitudes, influencing the successful inclusion in physical education and sport of children and adults with and without disabilities. PRQ: PHED 490 or consent of department.
590. PHYSICAL EDUCATION FOR INDIVIDUALS WITH PHYSICAL AND SENSORY DISORDERS (3). Study of the physical and motor characteristics resulting from chronic and/or permanent physical and sensory disabilities. Curricular and teaching strategies for physical education and sport/recreation programs. PRQ: PHED 490 or consent of department.

591. ASSESSMENT AND PROGRAM PLANNING IN ADAPTED PHYSICAL EDUCATION (3). Application of psychomotor testing procedures and adapted physical education. PRQ: PHED 490 and PHED 445, or consent of department.

592. CLINICAL EXPERIENCE IN SPECIAL PHYSICAL EDUCATION (1-2). Planning, implementing, and evaluating individualized development/ adapted physical activity programs for individuals and groups of individuals with disabilities and/or developmental delays in the areas of fundamental gross motor skill development, physical fitness, leisure/recreation skill, sport skill, and aquatics. May be repeated to a maximum of 3 semester hours. CRQ: PHED 490 or consent of department.

593. PRACTICUM IN SPORT MANAGEMENT (3). Supervised management experience for students in the specialization in sport management. PRQ: PHED 538, PHED 552, and consent of department.

595. WORKSHOP IN PHYSICAL EDUCATION (1-3). Workshop designed for study of special topics of interest in physical education, health education, and coaching. Content may vary and may focus attention on substantive material or operational problems. May be repeated; however, credit does not count toward the M.S.Ed. in physical education.

596. SPECIAL TOPICS IN PHYSICAL EDUCATION (1-3). Investigation of special topics, announced in advance, in physical education. May be repeated to a maximum of 6 semester hours when subject varies.

597. INTERNSHIP

A. Physical Education (1-6). Internship for students in the M.S.Ed. program in physical education. Supervised participation in field-based professional development activities to supplement theoretical background. May be repeated to a maximum of 6 semester hours. PRQ: Acceptance into graduate program and consent of department.

K. Adapted Physical Education (3). Supervised practicum experience for students in the adapted physical education specialization of the M.S.Ed. program. Planning, implementing, and evaluating adapted physical education for individuals with handicapping conditions. PRQ: PHED 490 and consent of department.

M. Sport Management (1-6). Supervised full-time management experience for students in a sports management setting. All course work must be completed prior to the internship.

599A. MASTER'S THESIS (1-6). An investigation of an area or problem relating to physical education. The thesis must show that the student possesses the ability to attack successfully a genuine problem in physical education and to draw valid and significant conclusions from the data. May be repeated to a maximum of 6 semester hours. PRQ: PHED 552 or consent of department.

620. SEMINAR IN PHYSICAL EDUCATION CURRICULUM (3). A seminar in which individuals recognize, study, and propose solutions to immediate issues in physical education curriculum. Areas in which such problems may exist include curriculum construction, curriculum statutes, liability possibilities, and administrative problems related to curriculum development.

635. BIOMECHANICS (3). Biomechanical principles in the analysis of human motion. Cinematography and other techniques used. PRQ: PHED 535 or consent of department.

640. ADMINISTRATIVE PROCEDURES OF PHYSICAL EDUCATION (3). The administration of physical education in schools and colleges. Includes case studies and consideration of group and individual administrative problems.

645. APPLICATION OF STATISTICS TO RESEARCH IN PHYSICAL EDUCATION (3). Application of descriptive and inferential statistics to research problems in physical education.

652. EXERCISE BIOENERGETICS (3). The processes involved in the production and utilization of energy in the human as these relate to exercise and training. Laboratory. PRQ: PHED 452 or consent of department.

653. CARDIAC REHABILITATION (3). Development and administration of cardiac rehabilitation programs, with emphasis on exercise prescription and exercise training of cardiac patients. PRQ: PHED 452, PHED 458, PHED 459, or consent of department.

671A. DIRECTED RESEARCH IN PHYSICAL EDUCATION (1-3). Supervised research in an area of physical education or recreation. Research topic must be approved by supervisor prior to registration. May be repeated to a maximum of 6 semester hours. PRQ: PHED 552 and consent of department.

686. SEMINAR IN MOTOR LEARNING (3). Evaluation of the current motor learning research in physical education and the development of a specific motor learning topic for discussion. PRQ: PHED 486 or consent of department.

Dance Education (PHDN)

473. DANCE AS ART IN EDUCATION (3). The development of aesthetic and cultural theories of dance as an art form in education. An opportunity for the 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.

476. SEMINAR IN RHYTHM AND DANCE (3). Rhythms and dance as a basic educational technique. Designed to assist in planning, teaching, and supervising rhythmic dance programs. PRQ: Consent of department.

Health Education (PHHE)

400. METHODS AND MATERIALS IN SCHOOL HEALTH EDUCATION (3). Health education programs in middle and secondary schools. Methodologies, strategies, materials, and resources for teaching health education. PRQ: PHHE 207, PHHE 301, and three content courses chosen from FCNS 201, PHHE 304, and PHHE 401-PHHE 412.

401. CURRENT ISSUES: HEALTH EDUCATION (1-3). Investigation of special topics in health education, announced in advance. May be repeated to a maximum of 6 semester hours when subject varies. PRQ: Consent of department.

402. COMMUNITY HEALTH PROGRAMS AND ISSUES (3). Programs and resources of health agencies, including the role of governmental agencies. Emphasis on the relationship between community and school health education programs. PRQ: PHHE 207 or consent of department.

406. HUMAN SEXUALITY (3). Emphasis on clarification of values and attitudes regarding sexuality issues and development of healthful sexual behavior.

407. DRUG DYNAMICS (3). Study of the emotional, physical, and financial influence of substance use and abuse on the individual and society. Emphasis on issues, techniques, and resources necessary for the health professional to interact with the school, community, and home environments. Includes pharmacology and legality of drugs.

408. MENTAL AND EMOTIONAL HEALTH (3). Study of personality traits and interpersonal relationships. Emphasis on development and maintenance of positive mental and emotional health.

409. DRUG EDUCATION (3). Focus on the emotional, social, psychological, and pharmacological aspects of substances which modify mood and behavior. Examination of theories and methods of preventive and rehabilitative substance abuse programs.

410. DEATH EDUCATION (3). Study of death as an integral phase of the life cycle. Examination of values and coping behaviors related to death and dying.

411. SEXUALITY EDUCATION (3). Emphasis on understanding values and beliefs concerning sexuality and on developing and implementing educational programs in school and community settings.

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.

502. CURRICULUM DEVELOPMENT IN SCHOOL HEALTH EDUCATION (3). The application of fundamental principles and concepts of curriculum development to school health programs including health instruction, health services and healthful school environment.
503. SCHOOL HEALTH PROGRAMS: PLANNING, MANAGING, AND EVALUATING (3). An analysis of the principles of Initiating, Implementing, conducting, and maintaining effective school health education programs including pertinent supervision and staffing issues.

504. SPECIAL TOPICS IN SCHOOL HEALTH EDUCATION (1-3). Special topics in school health education of current importance. May be repeated as often as desired; however, degree-seeking students may count only 6 semester hours toward the degree and may not repeat topics.

550. INDEPENDENT STUDY IN HEALTH EDUCATION (1-3). Open to students who wish to do advanced study in health education. Study or clinical experience planned in consultation with an adviser. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department following approval of written proposal.

555. CLINICAL/FIELD EXPERIENCE IN SCHOOL HEALTH EDUCATION (1-6). Supervised clinical/field experience in school health education with emphasis on health instruction, health facilities, and a healthful environment. May be repeated to a maximum of 6 semester hours. PRQ: Admission to health education certification program or consent of department.

671B. DIRECTED RESEARCH IN HEALTH EDUCATION (1-3). Supervised research in an area of health education. Research topic must be approved by supervisor prior to registration. May be repeated to a maximum of 6 semester hours. PRQ: PHED 552 and consent of department.
College of Engineering and Engineering Technology

Dean: Romualdas Kasuba, Ph.D., P.E.
Associate Dean: Promod Vohra, Ed.D., P.E.

Department of Electrical Engineering
Department of Industrial Engineering
Department of Mechanical Engineering
Department of Technology

Interdisciplinary Course Offered by the College of Engineering and Engineering Technology

IEET 490. TOPICS IN ENGINEERING AND ENGINEERING TECHNOLOGY (1-3). Special 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 the instructor.
Graduate Faculty

Ibrahim Abdel-Motaleb, associate professor, Ph.D., P.E., University of British Columbia
James P. Bobis, associate professor, Ph.D., P.E., University of Illinois
Sing T. Bow, professor, Ph.D., Northwestern University
Alan P. Genis, associate professor, Ph.D., Colorado State University
Reza Hashemian, professor, Ph.D., P.E., University of Wisconsin
Lili He, associate professor, Ph.D., State University of New York, Buffalo
Sen-Maw Kuo, associate professor, Ph.D., University of New Mexico
Vincent McGinn, professor, Ph.D., P.E., Pennsylvania State University
Gerald Miller, associate professor, Ph.D., Northwestern University
Mansour Tahernezhad, associate professor, Ph.D., P.E., University of Oklahoma
Peng-Yung Woo, associate professor, Ph.D., University of Pennsylvania
Donald Zinger, assistant professor, Ph.D., P.E., University of Wisconsin, Madison

Master of Science in Electrical Engineering

The Department of Electrical Engineering offers graduate studies leading to the M.S. in electrical engineering. The program is designed to stimulate creativity, to provide an in-depth understanding of the basic physical phenomena involved in electrical systems, and to provide the student with the ability to use modern techniques in the analysis and design of electrical components and systems. Bulletins describing graduate studies in electrical engineering are available from the departmental office.

Admission to the graduate program in electrical engineering requires a baccalaureate degree in electrical engineering. Consideration may also be given to applicants with degrees in related areas.

A student seeking to qualify for the M.S. in electrical engineering shall satisfy the following departmental requirements in addition to satisfying Graduate School requirements.

- The student with the support of his or her faculty adviser must submit to the department a program of graduate study approved by the student's graduate committee.
- Students are to complete at least 30 semester hours of graduate work, not more than 40 percent of which may be in 400-level courses.
- The 30 semester hours must include a minimum of 12 semester hours of course work in the department exclusive of ELE 597, ELE 598, and ELE 599.

Thesis Option

All students admitted to the department are classified as thesis option students. The thesis option is designed to prepare students for graduate work at the doctoral level and concentrates on original research techniques. The graduate program of courses must include 6 semester hours of thesis, ELE 599, on a topic approved by the student's graduate committee. The thesis must be satisfactorily defended at an oral examination. Portions of the research work required by ELE 599 may be performed in off-campus facilities if approved by the student's graduate committee.

Non-Thesis Option

All students admitted to the department are classified as thesis option students. Students wishing to pursue the non-thesis option are required to petition the department's graduate committee upon admission to the department. The non-thesis option is designed for practicing professionals who wish to pursue advanced study in electrical engineering culminating in the M.S. degree and who cannot pursue the traditional research experience of a thesis option. Students pursuing a M.S. degree under this option must earn a minimum of 30 semester hours of graduate credit including 3 semester hours of ELE 598, Special Topics in Electrical Engineering. The 3 hours of ELE 598 require significant original work which must be defended at an oral examination and submission of a written report.

Course List

430. DESIGN WITH FIELD PROGRAMMABLE LOGIC DEVICES (3).
Design of high performance logic design utilizing programmable logic gates. Design of finite state machines and introduction to latest computer-aided tools. PRQ: ELE 350 or consent of department.

431. THEORY OF SEMICONDUCTOR DEVICES II (3).
A continuation of ELE 335 dealing with complex semiconductor devices. The theory of operation of integrated circuits, solid state lasers, switching devices, and negative conductance microwave devices. PRQ: ELE 335 or consent of department.

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: Consent of department.

433. DESIGN OF GALLIUM ARSENIDE INTEGRATED CIRCUITS (3).
Fundamentals of GaAs devices and logic families; fabrication processes; physical layout for VLSI circuits; interconnection and testing of high speed systems. PRQ: ELE 335 or consent of department.

434. SEMICONDUCTOR MATERIAL AND DEVICE CHARACTERIZATION (3).
Study of fundamentals and principles of semiconductor material properties with applications to device characterization. Modern measurement techniques of semiconductor industry including electrical, optical, chemical, and physical methods. PRQ: ELE 335 or consent of department.

435. INTEGRATED CIRCUIT ENGINEERING (3).
Basic theory of integrated circuits including MOS processing technology. Principles of layout design, simulation, and design rule checking of large-scale integrated circuits. Introduction to design tools and techniques including utilization of available design software packages. Course requirements include the design, simulation, and layout of an integrated circuit to the point of mask generation. PRQ: ELE 330 and ELE 350, or consent of department.

436. ANALOG MOS VLSI ENGINEERING (3).
Analog MOS (nMOS and CMOS) circuits are introduced. MOS transistor is characterized both as a switch and a linear device. Different MOS circuits such as amplifiers, switches, comparators, sensors, D/A-A/D converters, multipliers, and neural networks are investigated. PRQ: ELE 330 or consent of department.
437. HYBRID CIRCUIT DESIGN (3). A lecture and laboratory course covering thick film processing techniques as they apply to the design and fabrication of miniature electronic circuits. Topics include minimum design rules, design of electronic components, artwork generation, screen preparation, screen printing, drying and firing profiles, and trimming. PRQ: ELE 360 or consent of department.

438. THIN FILM ENGINEERING (3). Lecture and laboratory course designed to demonstrate the theory and principles of thin film processing including vacuum processing and deposition techniques. Topics include resistive evaporation, DC sputtering, RF sputtering, ion beam sputtering, electron beam evaporation, methods of achieving vacuum, and measurement techniques. PRQ: ELE 335 or consent of department.

440. POWER ELECTRONICS (3). Introduction to the concepts involved with switch mode power electronic circuits. Analysis of basic circuit topologies including AC/DC, DC/DC, and DC/AC converters. Discussion of desired outputs of these circuits, as well as undesired components such as harmonics and ripple. PRQ: ELE 330 and ELE 340, or consent of department.

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 are discussed for each drive system. PRQ: ELE 330 and ELE 340, or consent of department.

457. MICROPROCESSOR II (3). Analysis of computer logic systems. Topics include parallel and serial I/O ports, memory interface, I/O devices and interrupts; specific I/O devices such as keyboard, CRT, and disk are covered. PRQ: ELE 356 or consent of department.

458. DIGITAL SYSTEM DESIGN (3). Design of digital systems reflecting current industrial practices. Includes design methodology, processor design, control logic design, memory systems, and system organization. PRQ: ELE 356 or consent of department.


553. DIGITAL SPEECH PROCESSING (3). The principles, techniques, and algorithms for speech signals. Emphasis on the representation of speech signals in digital form, the implementation of sophisticated processing techniques, and the classes of applications which rely heavily on digital processing. PRQ: ELE 551 or consent of department.

556. PATTERN RECOGNITION (3). Principles of approaches currently employed in pattern recognition; nonparametric classification, clustering analysis, unsupervised learning, dimensionality reduction, feature extraction, shape recognition, curve fitting, polygon clipping, and graphic display generation. PRQ: CSCI 230, ELE 458, or consent of department.
557. PARALLEL PROCESSING (3). Fundamental concepts of parallel processor organization. Development of basic algorithms suitable for such systems. Parallel sorting and interconnection networks. Applications and discussion of specific processors. PRQ: ELE 456 or consent of department.

558. ARTIFICIAL INTELLIGENCE (3). Methodology in the design of a knowledge-based system using LISP or other appropriate computer language. Subjects and strategies including information base, forward chaining, testing and debugging, and dedicated hardware. Stages from initial problem definition to system implementation will be discussed. PRQ: Consent of department.

559. ADAPTIVE SIGNAL PROCESSING (3). The adaptive transversal filter with least mean square algorithm is introduced and compared with frequency-domain and lattice algorithms. Applications to modeling and system identification, inverse modeling, deconvolution, equalization, adaptive noise canceling, and adaptive array. Practical examples and computer simulations. PRQ: ELE 551 or consent of department.

560. DIGITAL AND ANALOG COMMUNICATION SYSTEMS (3). Theory of digital communication systems including digital transmission of analog systems. Digital communication in the presence of noise and the use of error correcting codes. PRQ: ELE 360 or consent of department.


564. SPREAD SPECTRUM COMMUNICATION SYSTEMS (3). Concepts of spread spectrum digital communication and frequency hopping communication systems, including code tracking loops, and binary shift register sequence. PRQ: ELE 560 or consent of department.

571. MICROWAVE INTEGRATED CIRCUITS (3). Analysis and design of microwave/millimeter wave integrated circuits using various transmission-line media, such as microstrips, finlines, and dielectric waveguides. "Supercompact" will be used as a design tool. PRQ: Consent of department.

572. MICROWAVE SOLID-STATE DEVICES AND CIRCUITS (3). Theory of operation of passive and active microwave devices including beamlead detector and mixer diodes, switching and varactor diodes. Gunn and IMPATT diodes; use of these devices in various microwave circuits, such as receiver front-ends, Gunn and IMPATT oscillators, and voltage-controlled oscillators. Design of practical microwave/millimeter wave circuits. PRQ: Consent of department.

580. MICROPROCESSOR SENSORS AND CONTROL SYSTEMS (3). Application of microprocessors to various sensors including temperature, pressure, flow, and moisture measurements. Development of microprocessor based control systems. Includes laboratory experiments in microprocessor interface techniques. PRQ: ELE 380 or MEE 322, or consent of department.

581. STATE SPACE ANALYSIS (3). Study of linear systems emphasizing state space analysis. Topics include signals and signal representation, mathematical description of continuous and discrete systems, matrices and linear spaces, state variables and linear continuous systems, state variables and linear discrete systems, system controllability and observability, and introduction to stability theory. PRQ: ELE 480 or consent of department.

582. NONLINEAR CONTROL SYSTEMS (3). A study of the methods used for the analysis and design of nonlinear feedback control systems. Emphasis on the phase-plane method, numerical techniques, describing functions, and the methods of Lyapunov. PRQ: ELE 480 or consent of department.

583. COMPUTERIZED CONTROL AND MODELING OF AUTOMATED SYSTEMS (3). Study of computerized control in automated systems for industries, emphasizing digital controllers and linear quadratic controllers (LQC). Topics include introduction to computer control, digital controller design, command generation for process control, process modeling, optimal design methods, finite-wordlength effects, and case studies. PRQ: ELE 480 or consent of department.

584. OPTIMUM CONTROL SYSTEMS (3). Introduction to the basic theory and methods for the optimization of control system problems. Topics include matrix calculus, optimization with and without constraints, calculus of variations, dynamic programming with applications, optimal control of continuous and discrete systems, state estimation, and Kalman filters with electrical engineering applications. PRQ: ELE 481 or consent of department.

585. CONTROL LAWS AND STRATEGIES FOR MULTI-LINK MANIPULATORS (3). Study of servo control for manipulators, emphasizing various control schemes currently active in the robotic field. Topics include single-link control, kinematics and dynamics of multi-link manipulators, computed torque technique, variable-structure control, nonlinear feedback control, resolved motion control, adaptive control, and force control. PRQ: ELE 480 or consent of department.

597. INDEPENDENT STUDY (1-3). Independent pursuit of advanced problems in electrical engineering under faculty supervision. A written report is required. May be repeated to a maximum of 3 semester hours. Combined credit in ELE 597 and ELE 598 may not exceed 3 semester hours. PRQ: Consent of department.

598. SPECIAL TOPICS IN ELECTRICAL ENGINEERING (1-3). Advanced study of electrical engineering topics. May be repeated to a maximum of 3 semester hours. Combined credit in ELE 597 and ELE 598 may not exceed 3 semester hours. PRQ: Consent of department.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

650. MODERN SIGNAL PROCESSING ALGORITHMS AND APPLICATIONS (3). Study of modern signal processing algorithms and their applications. Algorithms to be investigated include fast signal processing algorithms, neural networks, higher-order spectrum analysis, wavelet analysis, and other emerging signal processing techniques. Example application areas are biomedical signal processing, signal representation and data compression, telecommunications, and speech processing. PRQ: ELE 550 and ELE 551, or consent of department.

655. ADVANCED TOPICS IN PATTERN RECOGNITION (3). Advanced treatment of pattern recognition techniques; clustering analysis and non-supervised learning, symbolic representation, pictorial shape analysis and recognition, graphics and image understanding. PRQ: ELE 556 or consent of department.

658. SEMINAR IN INDUSTRY AND TECHNOLOGY (1-3). Individual and group concerns related to industry and industrial technology. May be repeated. A maximum of 6 semester hours may be applied toward advanced degrees.

668. PRACTICUM IN TECHNOLOGY (1-12). Instruction arranged to meet the needs, concerns, and interests of individuals or groups in an appropriate setting under the guidance of a staff member of that setting and a university supervisor. Projects may include work/study in an appropriate setting and individual projects/research. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

Department of Industrial Engineering (IENG)

Chair: Mohamed Dessouky

Graduate Faculty

Ehsan Asoudegi, assistant professor, Ph.D., West Virginia University
Mohamed Dessouky, professor, Ph.D., P.E., Ohio State University
Murali Krishnamurthi, associate professor, Ph.D., Texas A&M University
Hampton R. Liggett, assistant professor, Ph.D., North Carolina State University
Richard L. Marcellus, associate professor, Ph.D., University of Michigan
Saeid Motavalli, associate professor, Ph.D., University of Pittsburgh

Master of Science in Industrial Engineering

The Department of Industrial Engineering offers the M.S. in industrial engineering with areas of study in manufacturing engineering, operations research, production control systems, human factors, and other areas of industrial engineering.

Industrial engineering is a system-oriented discipline 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 engineers are involved in such functions as designing a complete production facility or a single workplace, setting operator performance standards, planning manufacturing process, planning and controlling production, designing quality control systems, analyzing system reliability, simulating system performance, and planning and evaluating large-scale projects. Industrial 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.

Industrial engineering draws upon specialized knowledge and skill in mathematical, physical, and social sciences, together with the principles and methods of engineering analysis and design. The graduate work can thus be built on a background in various disciplines. Students with a baccalaureate degree in engineering or science or other disciplines are encouraged to consider graduate study in industrial engineering. Students with a baccalaureate degree in disciplines other than industrial engineering may be admitted to the graduate program, but will be required to take additional courses to overcome any deficiencies, as indicated below.

At the time of admission to the Graduate School, each student must have completed MATH 229, Calculus I (4), and MATH 230, Calculus II (4), or their equivalents, and at least one course from two of the six categories below. Before registering for IENG 599A or IENG 599B, each student must have completed the following or their equivalents.

CSCI 230, Computer Programming in FORTRAN (4)
OR IENG 280, Microcomputer Applications in Industrial Engineering (4)

IENG 370, Operations Research I (3)
MATH 232, Calculus III (4)
STAT 350, Introduction to Probability and Statistics (3)
One of the following (3-4)
CHEM 210, General Chemistry (4)
MEE 210, Engineering Mechanics I (3)
MEE 211, Engineering Mechanics II (3)
MEE 230, Materials and Manufacturing Processes (3)
PHYS 251A, General Physics (4)
STAT 470, Introduction to Probability Theory (3)

Courses taken outside the department at the 400 level or above must be approved by the adviser and the department chair.

Requirements

The student must submit to the department, with the help of a faculty adviser, a program of courses which must be approved by the student’s graduate committee.

The student must complete at least 25 semester hours of graduate work in courses at the 400-500 level including the following.

12 semester hours of courses at the 500 level or above. At least 9 semester hours must be from IENG courses numbered 500-598. No more than 3 semester hours can be from IENG 597.
12 semester hours of courses at the 400 level or above. At most, 6 of these hours can be from IENG 410, IENG 440, IENG 450, IENG 460, and IENG 480. At least 6 semester hours must be from IENG courses numbered 400-498 and 500-591.

1 semester hour of IENG 595.

Thesis Option

Complete 6 semester hours of thesis, IENG 599A, on a topic approved by the student’s graduate committee. The thesis must be satisfactorily defended at an oral examination. A portion of the research required by IENG 599A may be performed in off-campus facilities if approved by the student’s graduate committee.

Non-Thesis Option

Complete 6 semester hours of additional graduate work in courses at the 400 level or above (none of which may be from IENG 410, IENG 440, IENG 450, IENG 460, or IENG 480) and 6 semester hours of graduate project, IENG 599B, on a topic approved by the student’s adviser. The project details and results must be delivered at a public presentation.

Course List

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 250A and IENG 335 or STAT 350 or UBUS 223, or consent of department.

430. RELIABILITY ENGINEERING (3). Reliability analysis for the design, implementation, and operation of engineering systems, processes, and products. Fault trees, lifetime distributions, reliability, availability, and maintainability. PRQ: IENG 334 or STAT 350, or consent of department.
576. DISCRETE OPTIMIZATION (3). A study of the concepts, theories, and techniques of discrete optimization, both integer and combinatorial. Topics covered include polyhedral theory, theory of valid inequalities, computational complexity, polynomial algorithms, nonpolynomial algorithms, and nonexact algorithms. Applications include problems in graphs, networks, transportation, and scheduling. PRQ: IENG 370 or consent of department.

580. ADVANCED SIMULATION TECHNIQUES (3). Advanced simulation concepts; event scheduling, process interaction, and continuous modeling techniques. Design and analysis of simulation experiments; probability and statistics related to simulation such as length of run, probability distribution interference, variance reduction, and stopping rules. PRQ: IENG 480 or consent of department.

591. OCCUPATIONAL ERGONOMICS (3). The development and use of the human-machine model to establish the effects of interface design, environment, and work organization on the performance, safety, and health of the workforce. Topics include anthropometry, work physiology, biomechanics, environments (thermal, auditory, vibratory, and visual), and design of controls, display, and work spaces. PRQ: STAT 350 or consent of department.

595. GRADUATE SEMINAR (1). Techniques for planning, conducting, documenting, and presenting industrial engineering research. Requires attending lectures and discussions on current industrial engineering research. Should be taken during the first year of the graduate program. PRQ: Consent of department.

597. 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.

598. ADVANCED TOPICS IN INDUSTRIAL ENGINEERING (1-3). Advanced topics of contemporary interest. May be repeated to a maximum of 9 semester hours provided no repetition of subject matter occurs. PRQ: Consent of department.

599A. MASTER’S THESIS (1-6). May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

599B. GRADUATE PROJECT (1-6). Experience in the application of industrial engineering to real world systems through project work. May be repeated to a maximum of 6 semester hours. Written report required. Not available for credit in the thesis option. PRQ: Consent of department.
Department of Mechanical Engineering (MEE)

Chair: Parviz Payvar

Graduate Faculty

Behrooz Fallahi, associate professor, Ph.D., P.E., Purdue University
Sengoda G. Ganesan, associate professor, Ph.D., P.E., Oklahoma State University
Abhijit Gupta, associate professor, Ph.D., P.E., Pennsylvania State University
Romualdas Kasuba, professor, Ph.D., P.E., University of Illinois
Pradip Majumdar, associate professor, Ph.D., Illinois Institute of Technology
Peter Nagy, assistant professor, Ph.D., P.E., Carnegie-Mellon University
Parviz Payvar, professor, Ph.D., P.E., University of California, Berkeley
Scott Short, assistant professor, Ph.D., P.E., University of Dayton

Master of Science in Mechanical Engineering

The Department of Mechanical Engineering offers a program leading to the M.S. in mechanical engineering. The program is designed to stimulate creativity, to provide an in-depth understanding of the basic physical phenomena involved in mechanical systems, and to provide the student with the ability to use modern techniques in the analysis and design of mechanical components and systems.

Requirements

Complete at least 30 semester hours of graduate work, not more than 30 percent of which may be in courses numbered 400-499. All courses taken outside of the Department of Mechanical Engineering must have departmental approval in advance.

Complete a minimum of 6 semester hours of applied mathematics or advanced engineering analysis selected with the advice and consent of the student's adviser.

Complete one of the following core groups of courses.

**Applied Mechanics**—MEE 512 and MEE 529
**Dynamic Systems and Control**—MEE 520 and MEE 521
**Thermofluids**—MEE 540 and MEE 555

Upon completion of the above requirements and prior to starting the thesis work a program will be designed by the student and his or her adviser and approved by the departmental graduate committee.

The graduate program must include 6 semester hours of thesis, MEE 599, on a topic approved by the student's graduate committee. Employed students may use topics and facilities from their work if approved. The thesis must be satisfactorily defended at an oral examination.

Course List

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, MATH 336, and CSCI 230, or consent of department.

421. DYNAMIC SYSTEMS AND CONTROL II (3). Concepts of linear system theory; model analysis, Lagrange's Equations, approximate numerical methods for solving vibration problems, and Root-locus and frequency response design. Case studies in control and system design. PRQ: MEE 322 or ÉLE 380, or consent of department.

422. DESIGN OF ROBOT MANIPULATORS (3). Mathematics, programming, and control in the design of robot manipulators. Includes topics on kinematics, differential relationships and dynamics, motion trajectories, and control algorithms. PRQ: MEE 211 and MATH 336, or consent of department.

423. MECHANICAL RELIABILITY (3). Basic probability, statistics, and reliability concepts applicable to mechanical systems. Probabilistic treatment of loads, strength, reliability, safety indices, and fatigue. Mechanical equipment reliability; wear-out; reliability-based design, testing, and maintenance. PRQ: MEE 212 and 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 or consent of department. CRQ: MEE 470 or consent of department.


430. COMPUTER AIDED DESIGN AND MANUFACTURING (3). Computers for CAD/CAM; computer-aided design; numerical control; origin of CAM; industrial robots; group technology and process planning; computer control; computer-integrated manufacturing. PRQ: MEE 230 or CRQ: MEE 331, or consent of department.

431. COMPOSITE MATERIALS (3). Macromechanical behavior of a lamina; micromechanical behavior of a lamina; macromechanical behavior of a laminate; bending, buckling, and vibration of laminated plates. PRQ: MEE 212, MEE 330, and MEE 380, 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, or consent of department.

452. DESIGN OF THERMAL SYSTEMS (3). Application of principles of fluid mechanics, heat transfer, and thermodynamics in the component design of thermal systems. Examples are drawn from power generations, environmental control, and industrial processes. Students work on group projects for integration of these components in the design of thermal systems. PRQ: MEE 350 and MEE 352, or consent of department.

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, or consent of department.
480. FINITE ELEMENT METHODS (3). Concepts of finite element methods, variational formulation and approximation; linear and quadrilateral elements; finite element formulation; error analysis; isoparametric elements; computer implementation; applications from solid mechanics, dynamics, heat transfer, and fluid mechanics. PRQ: MEE 322, MEE 352, and MEE 380, or consent of department.

510. EXPERIMENTAL STRESS ANALYSIS (3). Elementary elasticity; brittle-coating methods; strain measurement methods and related instrumentation; photoelasticity; Moire methods; residual stress analysis. PRQ: MEE 490 or consent of department.

511. CONTINUUM MECHANICS (3). Vectors and tensors; stress; deformation; Eulerian and Lagrangian strain; physical laws; constitutive equations; solid mechanics; fluid mechanics. PRQ: Consent of department.

512. ADVANCED MECHANICS OF MATERIALS (3). Stress-strain-temperature relations; failure criteria; energy methods; torsion; nonsymmetrical bending; curved beams; flat plates; beams and elastic foundations; rotating discs; contact stresses. PRQ: MEE 470 or consent of department.

513. FATIGUE AND FRACTURE MECHANICS (3). Yielding; brittle fracture mechanics; plasticity induced fracture; fracture toughness; fatigue testing and analysis; stress concentration and notch sensitivity; low-cycle, corrosion, acoustic, and thermal fatigue. PRQ: MEE 512 or consent of department.

514. THEORY OF ELASTICITY AND APPLICATIONS (3). Plane stress and plane strain in rectangular, polar, and curvilinear coordinates; analysis of stress and strain in three dimensions; torsion of bars; bending of bars and plates; axisymmetric problems; thermal stress; propagation of waves in elastic solid media. PRQ: MEE 511 or consent of department.

515. APPLIED FINITE ELEMENT ANALYSIS FOR MECHANICAL ENGINEERS (3). Implementation of analysis and interpretation of results for discrete and continuous systems; computational techniques; available computer software; selection of model parameters; model evaluation and determination of accuracy; applications in mechanical engineering problems. PRQ: MEE 480 or consent of department.

520. ADVANCED DYNAMICS (3). Newtonian mechanics; analytical mechanics; rotating reference frames; rigid body dynamics; geometric theory; stability of autonomous and nonautonomous systems; perturbation techniques; transformation theory; gyroscopic. PRQ: MEE 421 or consent of department.

521. ADVANCED VIBRATIONS (3). Advanced principles of dynamics; discrete and continuous systems; free and forced vibrations; damped and undamped system response; approximate methods; wave solutions for continuous systems; random vibrations. PRQ: MEE 421 or consent of department.

522. EXPERIMENTAL METHODS IN MECHANICAL VIBRATIONS (3). Random vibrations; vibration pick-ups; dynamic strain measurements; beam vibrations; response analysis; modal analysis. PRQ: MEE 521 or consent of department.

523. ROBOT VISION CONTROL (3). Generalized images; segmented images; geometrical structures; relational structures; robot machine vision systems. PRQ: MEE 422 or consent of department.

524. ROBOT DYNAMICS AND CONTROL (3). Motion trajectories; principles of rigid body dynamics; robot dynamics; digital control systems; control of multiple link manipulators. PRQ: MEE 422 or consent of department.

525. ROBOT PROGRAMMING AND CONTROL (3). Task descriptions; structured programming; teaching; compliance and control; high level of robot language. PRQ: MEE 422 or consent of department.

529. MATERIALS ENGINEERING IN MECHANICAL DESIGN (3). The engineering design process, engineering materials and their properties, materials selection charts, case studies, selection of material and shape, and aesthetics of designs. PRQ: Consent of department.

530. STRUCTURE AND PROPERTIES OF POLYMERS (3). Molecular structure of amorphous, crystalline, and network polymers; theories of the glassy state; transition and melt temperatures; model prediction of viscoelastic properties; time-temperature superposition principle; theory of rubber elasticity. PRQ: MEE 430 or consent of department.

531. COMPUTER AIDED DESIGN OF MECHANICAL SYSTEMS (3). Finite element methods in structural analysis; computer aided design of symmetric and asymmetric machine elements under dynamic, impulsive, and thermal loadings; computer graphics; computer analysis and animation of kinematics of linkages. PRQ: MEE 480 or consent of department.

532. TRIBOLOGY (3). Surface topography and integrity; sliding and rolling friction; temperature in sliding contact; types, mechanisms, and theories of wear; antifriction and wear resistant material; boundary, hydrodynamic, and elastohydrodynamic lubrication; high pressure and wear resistant additives; solid lubricant; examples of tribology applied engineering design. PRQ: Consent of department.

533. COMPUTER AIDED MANUFACTURING (3). Manufacture of parts and assemblies; design for manufacturability; numerically controlled machine tools; robotics. PRQ: MEE 430 or consent of department.

534. EXPERIMENTAL METHODS IN MATERIALS SCIENCE (3). Structural evaluation of materials with X-ray techniques; scanning electron microscopy for image formation and use of column related techniques to characterize bulk specimens; transmission microscopy for image formation and defect analysis in materials science applications. PRQ: Consent of department.

540. ADVANCED FLUID MECHANICS (3). Kinematics of fluid flow; plane irrotational and incompressible fluid flows; Navier-Stokes equations; hydrodynamic stability; turbulence; two-dimensional boundary layers in incompressible flow; flow separation. PRQ: Consent of department.

542. DYNAMICS OF VISCOUS FLUIDS (3). Fundamentals of viscous fluid; Navier-Stokes equations; exact solutions, boundary layer equations and their physical interpretations; mathematical techniques of similarity transformations, integral methods, perturbation methods and numerical solutions. PRQ: MEE 540 or consent of department.

550. ADVANCED THERMODYNAMICS (3). Thermodynamic postulates and conditions of equilibrium; the Euler equation and the Gibbs-Duhem relations; Legendre transformations and the extreme principle; Maxwell relations; stability of thermodynamic systems; the Nernst Postulate; chemical reactions and combustion; chemical equilibrium; irreversible thermodynamics. PRQ: Consent of department.

555. CONDUCTION HEAT TRANSFER (3). Fundamentals of heat conduction; approximate and exact analytical methods; finite and semi-infinite bodies; one-dimensional composite material; phase change problems; nonlinear problems; heat transfer in anisotropic solids. PRQ: Consent of department.

556. CONVECTION HEAT TRANSFER (3). Conservation principles; laminar internal and external flows; natural convection; turbulent flow; heat transfer at high velocities; heat transfer through porous media; numerical methods in convection heat transfer. PRQ: Consent of department.

558. COMPUTATIONAL HEAT TRANSFER AND FLUID MECHANICS (3). Application of partial differential equations, finite difference methods, and finite element methods in heat transfer and fluid mechanics; stability analysis, convergence criteria, and accuracy of computational techniques. PRQ: Consent of department.

592. ADVANCED MECHANICAL ENGINEERING ANALYSIS (3). Calculus of variations for deformable bodies; Sturm-Liouville problems; LaGrange's equations and generalized dynamical entities; integral equations in mechanical engineering; Green's functions; theory of distributions; one dimensional boundary value problems; partial differential equations in mechanical engineering. Applications of heat, conduction and convection, fluid dynamics, and structural mechanics. PRQ: Consent of department.

597. INDEPENDENT STUDY (1-3). Independent pursuit of advanced problems in mechanical engineering under faculty supervision. A written report is required. May be repeated to a maximum of 3 semester hours. Combined credit in MEE 597 and MEE 598 may not exceed 3 semester hours. PRQ: Consent of department.

598. SPECIAL TOPICS IN MECHANICAL ENGINEERING (1-3). Advanced study of mechanical engineering topics. May be repeated to a maximum of 3 semester hours. Combined credit in MEE 597 and MEE 598 may not exceed 3 semester hours. PRQ: Consent of department.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.
Department of Technology (TECH)

Chair: Dennis V. Stoia

Graduate Faculty
Roger W. Cliffe, professor, Distinguished Teaching Professor, Ed.D., University of Northern Colorado
Frank J. Gruber IV, associate professor, Ph.D., Michigan State University
Earl E. Hansen, associate professor, Ed.D., Oklahoma State University
Gary E. Lintereur, associate professor, Ph.D., Ohio State University
Said Oucheriah, assistant professor, Ph.D., P.E., Cleveland State University
Conard L. White, professor, Ph.D., University of Illinois

Master of Science in Industrial Management

The Department of Technology offers graduate studies leading to the M.S. in industrial management. The objective of this graduate program is to build upon the competencies achieved at the baccalaureate level and to prepare students to assume managerial positions in technical fields in manufacturing industries.

Admission to the graduate program in industrial management requires a baccalaureate degree in engineering, technology, or industrial education. Consideration may also be given to applicants with degrees in related areas who have appropriate industrial experience. Students should review the admission and graduate degree requirements in this catalog. Admission decisions are normally made within three weeks of receipt of the completed application.

A graduate faculty adviser is appointed for each student seeking a master's degree, and together they plan a program of courses leading to the degree.

A student seeking to qualify for the M.S. in industrial management must complete a minimum of 33 semester hours of graduate work, at least 50 percent of which must be in 500- and 600-level courses. With the approval of the departmental adviser, a maximum of 15 semester hours of graduate credit for courses taken at NIU as a student-at-large may be counted toward meeting the requirements for the degree. Students without undergraduate course work in accounting fundamentals are required to complete ACCY 206 or ACCY 288 as a deficiency. Course work in which the student received both undergraduate credit and a grade of B or higher cannot be repeated to fulfill the 33 semester hour requirement.

Requirements

TECH 500, Research in Industry and Technology (3)
TECH 550, Leadership Theories and Techniques (3), OR TECH 562, Industrial Systems Management (3)
TECH 555, Case Studies in Manufacturing–Labor Relations (3)

Areas of Study (9-11)
Complete at least 3 courses from one area of study.
Automated Manufacturing - TECH 420 (3), TECH 425 (4), TECH 476 (3), TECH 494 (4)
Engineering - Graduate-level engineering courses approved by adviser
Industrial Hygiene - TECH 433 (3), TECH 437 (3), TECH 440 (3), TECH 531 (3)
Industrial Systems - TECH 442 (3), TECH 443 (3), TECH 444 (3), TECH 456 (3)
Industrial Training - TECH 402 (3), TECH 406 (3), TECH 408 (3), TECH 502 (3)
Occupational Safety - TECH 436 (3), TECH 481 (3), TECH 482 (3), TECH 534 (3)
Strategic Management - TECH 560 (3), TECH 562 (3), TECH 594 (3), TECH 658 (3)
Technology Education - TECH 405 (3), TECH 645 (3), TECH 658 (3), TECH 690 (3)
Technology of Quality - TECH 447 (3), TECH 452 (3), TECH 491 (3), TECH 548 (3)

Industrial Management Electives (7-9)
With the consent of adviser, complete one of the following.
A second area of study from the list above (9)
Graduate-level course work approved by adviser related to the student's professional objectives from any department(s) in the university (7-9)
TECH 599B, Master's Thesis (6), and 3 semester hours of graduate-level course work approved by adviser related to the student's professional objectives from any department(s) in the university (9)

University Electives (4-6)
With the consent of adviser and the department chair, complete 4-6 semester hours of graduate-level course work from any department(s) in the university.

Course List

401. ETHICS IN TECHNOLOGY (3). An exploration from the point of view of ethical theory of a number of ethical problems in the work environment encountered by technologists and engineers. This course enables students to recognize the moral aspects of business decisions on the personal level and of business institutions on the social level.

402. INDUSTRIAL TRAINING AND EVALUATION (3). The history of employee training, kinds of training, training programs, instructional methods, and evaluation procedures.

404. SUPERVISION IN INDUSTRY (3). Principles, methods, and techniques for supervision of people in their work. For supervisory personnel and those preparing for such positions.

405. TECHNOLOGY, A HUMAN ENDEAVOR (3). An analysis of the study of technology for policy-oriented decision makers in various fields. The formative role of technology in the shaping of policy is stressed through lectures, readings, and field experiences.
406. OCCUPATIONAL ANALYSIS (3). Techniques and procedures in analyzing occupations to ascertain their basic elements.

407. INDUSTRIAL COOPERATIVE EDUCATION (6). Problems and procedures in the operation of cooperative part-time programs.

408. INDUSTRIAL CONFERENCE AND MEETING MANAGEMENT (3). Purposes, advantages, and limitations of planning, leading, developing, and evaluating visual and written materials for conferences and meetings.

412. TECHNICAL ILLUSTRATION (3). Axonometric, oblique, perspective, and orthographic views and mechanical drawing techniques including line and surface shading, exploded views, pictorial details, and assemblies. Emphasis on illustrating for catalogs, advertising media, service manuals, and installation diagrams. Six periods a week. PRQ: TECH 212 or consent of department.

414. MACHINE DESIGN (3). Design principles of machine elements such as linkages, shafts, gears, cams, and fasteners. Factors influencing the selection of materials and their significance in design. Economy, loading conditions, stresses, and deformation related to satisfactory machine design. PRQ: TECH 280, TECH 314, and TECH 360, or consent of department.

420. AUTOMATED MANUFACTURING SYSTEMS (3). A laboratory oriented course which involves the study of computer integrated manufacturing systems utilized by industry, including robotics, computer-aided manufacturing, computer-aided design/drafting, computer-aided testing/inspection, and computer-aided process planning. Emphasis on laboratory experience with computer technology. CRQ: TECH 111 and TECH 395, or consent of department.

425. PROGRAMMABLE ELECTRONIC CONTROLLERS (4). Basic concepts and skills needed to program and apply programmable electronic controllers in industry. Experiments in operation, programming, and industrial applications. PRQ: TECH 395 or consent of department.

426. FLUID POWER TECHNOLOGY (3). Fluid power principles, devices, materials, and failure analysis. Hydraulic pneumatic systems are examined with emphasis on compressors, pumps, motors, actuators, fluids, fluid distribution, protective devices, and control components. PRQ: PHYS 250 and MATH 229, or consent of department.

428. TESTING METHODS AND PROCEDURES (3). Methods and procedures in non-destructive and destructive testing of metallic and non-metallic materials and industrial products. Radiography, ultrasonics, dye penetrants, eddy current, and mechanical tests are methods explored in addition to evaluative procedures. Demonstrations for preparing specimens for metallographic analysis are included. PRQ: TECH 395 and TECH 427, or consent of department.

429. PLANT LOCATION, LAYOUT, AND MATERIAL 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.

431. INDUSTRIAL VENTILATION (3). Application of principles of industrial ventilation for the safety professional. Emphasis on the design of ventilation to protect workers and the environment. PRQ: TECH 111, TECH 434, and TECH 437, or consent of department.

432. DISASTER PREPAREDNESS (3). Organization for survival from natural and human-made disasters. Warning and communication systems, radiological monitoring, shelter management. Fallout shelter experience included.

433. TOXICOLOGY FOR INDUSTRY (3). Basic concepts of toxicity as it relates to chemicals used in industrial work places. Assessment of the hazards of chemicals and how to deal with them safely. PRQ: CHEM 210, TECH 434, and TECH 437, or consent of department.

434. HUMAN FACTORS IN INDUSTRIAL ACCIDENT PREVENTION (3). A survey of human factors principles and techniques used to minimize the frequency and severity of industrial accidents.

435. LEGAL ASPECTS OF SAFETY (3). A 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). An analysis of current problems and trends in the design and supervision of model industrial accident prevention programs. PRQ: ECON 260T and TECH 434, or consent of department.

437. FUNDAMENTALS OF INDUSTRIAL HYGIENE (3). Application of principles of industrial hygiene for the safety specialist, whose role has been greatly expanded by recent federal legislation. Emphasis on stress-producing conditions including noise, ventilation, temperature, radiation, lighting, and their effect on human performance and productivity. PRQ: TECH 434 or consent of department.

438. SAFETY IN TRANSPORTATION SYSTEMS (3). The status of, and rationale for, improvements in safety practices and legislation for the commercial carriers (rail, highway, water, and air transportation). Each student shall investigate one system in depth.

439. ADVANCED TRAFFIC SAFETY EDUCATION PRACTICES (3). A study of advanced driving performance capabilities, driving strategies, and tactics. Emphasis on administrative and instructional practices for advanced driver education programs. PRQ: TECH 331 or consent of department.


442. WORK SIMPLIFICATION AND MEASUREMENT (3). Techniques for improving and standardizing methods; procedures for measuring work and developing time standards in production and service activities.

443. ENGINEERING ECONOMY (3). Principles used in the systematic evaluation of the net worth of benefits resulting from proposed engineering and business ventures in relation to the expenditures associated with those undertakings.

444. MANUFACTURING CONTROL SYSTEMS (3). Implementation and operation of manufacturing systems including facility planning, quality improvement, labor measurement, production, and inventory control systems. Forecasting methods; the design and organization of routings, schedules, and bills-of-material; computer-based materials control; quality and productivity techniques within process and job-lot environments. PRQ: Consent of department.

447. TOTAL QUALITY CONTROL (3). Implementation of quality control systems. The design and organization of the quality assurance plan; computer-based process control; quality motivation and involvement; quality auditing. CRQ: TECH 491 or consent of department.

452. GRAPHIC ARTS QUALITY ASSURANCE (3). An in-depth study of printing controls, with emphasis on general principles of quality controls. A study of devices utilized in composition, plate, press, bindery, and finishing. PRQ: TECH 150 and consent of department.

454. DESKTOP PUBLISHING (3). Operations in typesetting; the use of computers in printing; operation of typical electronic machines. PRQ: Consent of department.

456. PRINTING ESTIMATING (3). Identification and determination of costs relative to materials, operations, and factors involved in the production of printed matter. PRQ: TECH 150 and consent of department.

461. MECHANICAL DESIGN ANALYSIS (3). Analysis and synthesis of machine components such as fasteners, springs, gears, shafts, bearings, lubrication. Analytical methods for the study of impact, dynamic loading, and fatigue; comprehensive treatment of failure, safety, and reliability. PRQ: TECH 369 or consent of department.

463. HEATING, VENTILATING, AND AIR CONDITIONING (3). Psychrometric principles; thermal comfort; calculation of heating and cooling loads; design of air distribution systems and selection of components. PRQ: TECH 368 or consent of department.

464. ELEMENTS OF HEAT TRANSFER (3). Heat transfer by conduction, convection, and radiation. Similarity and analog concepts in heat, mass, and momentum transfer. Methods for the determination of coefficients, combined modes of heat transfer and heat exchangers. PRQ: TECH 368 and TECH 468, or consent of department.


473. SWITCHING THEORY (3). Topics, techniques, and applications of combinatorial and discrete methods to switching theory. Survey of topics for data structures and algorithm analysis. Fundamental concepts of rings, groups, functions, fields, sets, and Boolean algebra and their engineering application. Graphs, trees, optimization, and matching techniques as applied to computer networking and electrical networks. PRQ: MATH 230, TECH 377, and consent of department.
475. ANALYSIS OF MICROPROCESSORS (3). Analysis of microprocessors with emphasis on architecture, state transition, machine cycles, and timing diagrams; instruction set; and interface techniques. PRQ: TECH 377 or consent of department.

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 375 or ELE 380 or MEE 322, or consent of department.

481. ERGONOMICS (3). A 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 organizational factors relevant to operators at work, including monotony, repetitive work, training, and selection. PRQ: TECH 434, MATH 210, and PHYS 250, or consent of department.

482. INDUSTRIAL SAFETY ENGINEERING ANALYSIS (3). The practical theories and applications of safety engineering in the industrial environment. Accident investigation and job safety analysis. PRQ: TECH 250, TECH 231, TECH 434, and PHYS 250, 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.

491. INDUSTRIAL QUALITY CONTROL (3). Techniques of establishing and maintaining quality of product including statistical quality control applications.

494. ENGINEERING AUTOMATION (4). Fundamental principles and applications of project management, team concept, and operations utilizing design and computer graphics, process control with computer logic, CAD/CAM, and automated systems. Team design project(s) required. PRQ: TECH 394 or consent of department.

495. INDUSTRIAL COMPUTER PROGRAMMING (3). Use and organization of computer systems. Application topics including models for decision making, computer simulation, human-machine communication, industrial information storage and retrieval, data collection and transmission, symbolic computation, and advanced computer languages. PRQ: TECH 395 or consent of department.

500. RESEARCH IN INDUSTRY AND TECHNOLOGY (3). Designed to acquaint the student with research methodology as it applies to technology and industrial education. Students develop competence in research design, interpretation of research results, and the application of statistical techniques to solving technical problems.

502. CONTENT AND METHODS OF INDUSTRIAL EDUCATION AND TRAINING (3). Interest and motivation of learning, skill development, teaching devices, methods and procedures, and facility and equipment management. Designed to improve the techniques of teaching technical subjects.

505. CURRICULUM CONSTRUCTION IN INDUSTRIAL EDUCATION (3). The concepts underlying course construction in industrial education. Problems in the selection and organization of instructional materials and course content.

531. INDUSTRIAL HYGIENE (3). Lectures and demonstrations covering evaluation and control of exposure to dusts, fumes, mists, vapors, gases, radiation hazards, noise, and abnormal temperatures. PRQ: TECH 437 or consent of department.

532. INSTITUTIONAL SAFETY PROGRAMS (3). The organization, supervision, and administration of institutional safety programs. Each student shall investigate one safety program in depth. PRQ: Consent of department.

534. BEHAVIORAL FACTORS IN SAFETY (3). Psychological, physiological, and sociological factors as they affect human safety. Students identify and pursue a topic of interest. PRQ: Consent of department.

535. SEMINAR IN SAFETY (1-6). Current issues or problems in safety. May be repeated. A limit of 6 semester hours may be applied toward advanced degrees.

537. SYSTEMS ANALYSIS IN SAFETY (4). Systems analysis techniques applied to accident record systems, theories of accident causation, and effectiveness of safety programs. PRQ: Consent of department.

539. RESEARCH IN SAFETY (1-3). Open to qualified students who wish to do individual research in safety. May be repeated. A limit of 6 semester hours may be applied toward advanced degrees. PRQ: Consent of department.

541. TEACHING TECHNIQUES IN HOME REPAIRS AND MANIPULATIVE CRAFTS FOR THE VISUALLY IMPAIRED (3). Laboratory experimentation with simple home repairs and sampling of manipulative crafts using techniques employed by teachers of visually impaired people.

548. QUALITY DECISION METHODS (3). Problems and case studies utilizing the decision mathematical methods for quality analysis including on-line process control, design of experiments, regression analysis, and other mathematical tools. PRQ: TECH 491 or consent of department.

550. LEADERSHIP THEORIES AND TECHNIQUES (3). A study of leadership theories and managerial techniques used to accomplish predetermined results through others. Topics include planning, motivation, communication, delegation, and employee selection as applied in industrial settings/situations. PRQ: TECH 404 or consent of department.

555. CASE STUDIES IN MANUFACTURING-LABOR RELATIONS (3). Using recent labor arbitration awards, students examine and analyze industrial relations from both the management and the union perspective. Students research and analyze multiple cases on an individually assigned topic as a final project. PRQ: TECH 404 or consent of department.


562. INDUSTRIAL SYSTEMS MANAGEMENT (3). Organizational structures; integrated systems management of product and process design, production, automation, technology, engineering, maintenance, and quality; technology/worker interface; implementation of change, international issues, and case studies. PRQ: Consent of department.

573. ADVANCED ELECTRICAL SERVOMECHANISMS (3). The analysis and design of servomechanisms using analytical tools.

594. INDUSTRIAL PROJECT MANAGEMENT (3). Advanced concepts, principles, and skills of a variety of types of industrial project management. Emphasis on technological tools and project management techniques. Analysis, case studies, industrial research, and project required. PRQ: TECH 582 or consent of department.

597. WORKSHOP IN INDUSTRY AND 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.

598. TECHNICAL PROBLEMS (1-6).
A. General
B. Automation
C. Computer
D. Drawing
E. Electronics
J. Graphic Arts
K. Industrial Supervision
M. Metals
N. Numerical Control
R. Mechanical Technology
U. Power Mechanics
V. Safety
W. Wood Technology

Advanced study of technical problems at the master's level under direct faculty supervision. May be repeated to a maximum of 6 semester hours. PRQ: Consent of faculty member who will supervise the study.

599A. DIRECTED STUDY (1-6). Directed study in independent research projects at the master's level. May be repeated to a maximum of 6 semester hours. PRQ: Consent of adviser and faculty member directing the study.

599B. MASTER'S THESIS (1-6). Open only to students who elect to write a thesis for the master's degree. May be repeated to a maximum of 6 semester hours. PRQ: Consent of adviser.

601. HISTORY AND PHILOSOPHY OF INDUSTRIAL EDUCATION (3). The leaders, organizations, and movements that have contributed to the development of industrial education. Philosophies, issues, and problems relating to the past and present.
603. EVALUATION IN INDUSTRIAL EDUCATION (3). The principles and techniques of evaluation of instruction as applied to courses in industrial education.

606. PROGRAMS AND ORGANIZATION OF INDUSTRIAL EDUCATION (3). The philosophy, objectives, organization, administration, and significant literature for vocational-industrial all-day, part-time, and evening programs, including apprenticeship and vocational rehabilitation. Special attention given to legislation and standards for state and federal aid to local vocational-industrial and technical programs.

607. TRENDS IN INDUSTRIAL EDUCATION (3). The evaluation and significance of trends from the viewpoints of theory and practice.

609. INDUSTRIAL INTERNSHIP (3-6). A department-approved work experience designed to provide the student lacking full-time industrial experience an opportunity to observe and participate in activities that are applications of principles and skills acquired previously. 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 nine 40-hour work weeks is required for each 3 semester hours of credit. May be repeated to a maximum of 6 semester hours. PRQ: Consent of major adviser and supervising instructor.

645. TECHNOLOGY IN INDUSTRIAL EDUCATION (3). Modern industrial developments such as automation, uses of new types of energy, and synthetic materials.

658. SEMINAR IN INDUSTRY AND TECHNOLOGY (1-3). Individual and group concerns related to industry and industrial technology. May be repeated. A maximum of 6 semester hours may be applied toward advanced degrees.

686. PRACTICUM IN TECHNOLOGY (1-12). Instruction arranged to meet the needs, concerns, and interests of individuals or groups in an appropriate setting under the guidance of a staff member of that setting and a university supervisor. Projects may include work/study in an appropriate setting and individual projects/research. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

College of Health and Human Sciences

Dean: James E. Lankford, Ph.D.
Associate Dean: Sharon M. Miller, Ph.C.

School of Allied Health Professions
Department of Communicative Disorders
School of Family, Consumer, and Nutrition Sciences
Department of Military Science
School of Nursing

Concentration in Gerontology

Director: John F. Stolte

The gerontology program is an interdisciplinary program that fosters educational, research, and service activities pertinent to aging. At the graduate level, the program offers an interdisciplinary concentration. The gerontology concentration allows students to integrate current knowledge and research on adulthood and aging into their degree programs. A student wishing to pursue this concentration must apply to the gerontology program.

Students must complete a minimum of 15 semester hours with at least 9 semester hours from the primary content area. A student may take no more than 9 of the required 15 semester hours from a single department. With the approval of the director of the gerontology program, 3 semester hours of independent study, directed individual study, or other appropriate course work may be substituted for 3 semester hours of course work in the concentration.

Primary Content Area (9-15)

IDSP 465, Issues in Gerontology (3)
Courses selected from the following (6-12)
EPCO 667, Counseling Older Persons (3)
FCNS 486, Aging and the Family (3)
LEAC 590, Workshop in Adult Continuing Education (3)
NURS 555, Advanced Older Adult Health Nursing: Aging Processes (3)
NURS 556, Advanced Older Adult Health Nursing: Alterations in Mental Health (3)
NURS 557, Advanced Older Adult Health Nursing: Societal Impact and Response (3)
PHED 454, Exercise Gerontology (3)
PSYC 425, Adult Development and Aging (3)
SOCI 462, Aging and Society (3)

Other Courses Related to Gerontology (0-6)

AHPH 465, Principles of Nursing Home Administration (3)
ANTH 465, Medical Anthropology (3)
BIOS 556, Human Cell Physiology (3)
COMD 574, Cognitive-Linguistic Disorders of Neurologically Impaired Adults (3)
EPSY 510, Psychoeducational Development in Adulthood (3)
EPSY 610, Advanced Seminar in Human Development (3)
FCNS 553C, Nutrition in Growth and Human Development: Geriatric Nutrition (3)
LEAC 501, Adult Learning: Maturity Through Old Age (3)
NURS 595, Advanced Practicum in Nursing (6)
PHED 555, Clinical Experience in Exercise Gerontology (3)
PHHE 410, Death Education (3)
PSPA 526, Social Policy (3)
PSYC 465, Advanced Developmental Psychology (3)
SOCI 451, Medical Sociology (3)
SOCI 460, Social Structure and the Life Course (3)
SOCI 482, Sociology of Death and Dying (3)

Faculty Associates

John F. Stolte, director of gerontology program, professor of sociology, Ph.D.
Susan Bowers, assistant professor of family, consumer, and nutrition sciences, Ph.D.
Dianne Cearlock, associate professor of allied health professions, Ph.D.
James R. Ciesla, assistant professor of allied health professions, Ph.D.
Carolinda Douglass, assistant professor of allied health professions, Ph.D.
T. Daniel Griffiths, professor of biological sciences, Ph.D.
Rebecca A. Johnson, assistant professor of nursing, Ph.D.
Julie Johnson-Hillary, assistant professor of family, consumer, and nutrition sciences, Ph.D.
Robert E. Keim, professor of family, consumer, and nutrition sciences, Ph.D.
Sondra King, associate professor of family, consumer, and nutrition sciences, Ph.D.
Lidia Lee, assistant professor of communicative disorders, Ph.D.
Robert C. Mason, professor of leadership and educational policy studies and director, Office of Research and Evaluation in Adult Continuing Education, Ed.D.
Sharon M. Miller, professor of allied health professions, Ph.C.
Robin D. Moremen, associate professor of sociology, Ph.D.
Nancy Nuzzo, assistant professor of allied health professions, Ph.D.
Aimee D. Prawitz, assistant professor of family, consumer, and nutrition sciences, Ph.D.
Robert Ridinger, associate professor in University Libraries, M.A.
James H. Rimmer, professor of physical education, Ph.D.
Bruce Rocheleau, associate professor of political science, Ph.D.
Jody Newman Ryan, assistant professor of communicative disorders, Ph.D.
James N. Schubert, professor of political science, Ph.D.
Laura S. Smart, associate professor of family, consumer, and nutrition sciences, Ph.D.
M. Cecil Smith, associate professor of educational psychology, counseling, and special education, Ph.D.
Sherilyn F. Spear, associate professor of allied health professions, Ph.D.
Josephine Umoror, associate professor of family, consumer, and nutrition sciences, Ph.D.
James F. Willott, professor of psychology, Distinguished Research Professor, Ph.D.

1IDSP 465, ISSUES IN GERONTOLOGY (3). An interdisciplinary examination of aging and the older adult population. Biological, psychological, social, and educational aspects of aging; theoretical and programmatic perspectives. PRQ: Consent of gerontology program director.

2Restricted to registered nurses who hold a baccalaureate degree in nursing.

3Three semester hours from the practicum course may be applied toward concentration requirements when course content emphasizes aging, as determined by gerontology faculty associates from the School of Nursing.
School of Allied Health Professions (AH-

Chair: Sherilynn F. Spear

Graduate Faculty

Mary Jo Blaschak, associate professor, Ph.D., Northwestern University
Ngoyi Bukonda, assistant professor, Ph.D., University of Minnesota
Daniel Cabrera, assistant professor, Ph.D., University of California at Los Angeles
Diane M. Cearlock, associate professor, Ph.D., University of Illinois
James R. Ciesla, assistant professor, Ph.D., University of South Carolina
Carolinda Douglass, assistant professor, Ph.D., RAND Graduate School of Policy Studies
Patricia Etnyre-Zacher, assistant professor, Ed.D., Northern Illinois University
Elizabeth D. Kay, associate professor, Ph.D., University of Illinois
Sharon M. Miller, professor, Ph.C., University of California, Santa Cruz
Nancy A. Nuzzo, associate professor, Ph.D., University of Illinois
William A. Oleckno, professor, H.S.D., Indiana University
GinaMarie Piane, assistant professor, Dr.P.H., University of Illinois, Chicago
Sherilynn F. Spear, associate professor, Ph.D., University of Iowa

The School of Allied Health Professions offers a Master of Public Health (M.P.H.) degree. The curriculum prepares students for leadership positions in health services management and health promotion. A generalist focus is also available for qualified health care professionals. Students learn skills in leadership, problem solving, and planning and promoting change in public health and health care service systems.

Students-at-large who wish to take graduate courses in the public health program may do so with the consent of a program adviser. Students-at-large who intend to apply for admission to the public health program are encouraged to do so as soon as possible.

Procedures for admission to the program and other detailed information are available from the public and community health programs office. This office's e-mail address is pch@niu.edu.

Non-Thesis Option

A total of 40-46 semester hours of graduate credit is required for the degree.

Public Health Core (21)

AHPH 492, Behavioral and Social Aspects of Public Health (3)
AHPH 500, Health Care Delivery in the U.S. (3)
AHPH 530, Health Services Management (3)
AHPH 535, Problems and Issues in Environmental Health (3)
AHPH 555, Principles and Methods of Epidemiology (3)
AHPH 590, Applied Research Methods in Public Health (3)
BIOS 570, Biostatistical Analysis (3), or another 3 semester hour course in statistics approved by the student's adviser.

Focus Area Requirements (15)

Students must select one of the following areas with the approval of the student's adviser.

Health Promotion

AHPH 520, Primary Prevention and Health Promotion (3)
AHPH 588, Community Health Promotion Programs (3)
AHPH 593, Financial Decision-Making for Health Services Managers (3)
6 additional semester hours with the approval of the student's adviser.

Health Services Management

AHPH 540, Human Resource Management in the Health Care Setting (3)
AHPH 575, Health Economics for Health Services Managers (3)
AHPH 593, Financial Decision-Making for Health Services Managers (3)
6 additional semester hours with the approval of the student's adviser.

Generalist

AHPH 589, Community Health Planning (3)
12 additional semester hours with the approval of the student's adviser.

Additional Requirements (4-10)

AHPH 595, Internship in Public Health (3-9)
AHPH 599B, Master's Research Paper (1)

Thesis Option

Same requirements as the non-thesis option except that 6 additional semester hours of AHPH 599A, Master's Thesis, are required.

*Available only to qualified health care professionals with accredited degrees in medicine, dentistry, nursing, or related health care specialties.
Course List

Allied Health Professions (AHP)

440. INTRODUCTION TO TEACHING IN THE ALLIED HEALTH PROFESSIONS (1-3). An 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. PRQ: Consent of school.

444. TOPICS IN ALLIED HEALTH PROFESSIONS (1-3). The examination of contemporary issues and problems in the allied health occupations and professions. May be repeated to a maximum of 6 semester hours.

446. SUPERVISION IN HEALTH CARE FACILITIES (1-3). A study of the principles of learning and contemporary issues and problems in the allied health occupations and professions. May be repeated to a maximum of 6 semester hours.


Public Health (AHPH)

445. COMMUNITY HEALTH PROMOTION (3). Principles and techniques for promoting and maintaining health. Overview of individual and community-level interventions designed to prevent illness/injury and promote well-being. Emphasis on the acquisition and maintenance of health-enhancing behaviors and the design of health promoting environments. PRQ: AHP 295 or consent of school.

465. PRINCIPLES OF LONG-TERM CARE ADMINISTRATION (3). Overview of long-term care services, personnel, and the role of the administrator. Emphasis on organizational management and operations control. Resident care issues, federal and state regulations, and licensing and certification also addressed. PRQ: AHPH 460 or consent of school.

491. ASSESSMENT, TREATMENT, AND PREVENTION OF DRUG AND ALCOHOL ADDICTION (3). Drug and alcohol addiction viewed from physiological, interpersonal, and cultural perspectives. Treatment techniques and programs to prevent drug and alcohol addiction.


495. FUNDING FOR PROGRAMS IN COMMUNITY HEALTH (3). A seminar in identifying significant health problems and preparing competitive grant proposals. Students will gain experience in writing and evaluating grant proposals and identifying potential funding agencies. PRQ: Consent of school.

500. HEALTH CARE DELIVERY IN THE U.S. (3). Evaluation of health care controversies using critical thinking and knowledge of the sources, uses, and analysis of the health literature, especially data. Topics include bioethics, health system structure, financing methods, role of government, health personnel, mental health policy, and special populations' needs.

510. CRISIS THEORY AND CASE MANAGEMENT (3). Study of the principles of mental health crises and application of these principles in practical diagnostics, case management, and outcome evaluation. PRQ: Consent of school.

520. PRIMARY PREVENTION AND HEALTH PROMOTION (3). Analysis of primary prevention in the area of community health including health promotion program planning, development, implementation, and evaluation strategies. PRQ: AHPH 492 or consent of school.

530. HEALTH SERVICES MANAGEMENT (3). Analysis of techniques in leadership and management applicable to the public health field. Topics include change theory, power dynamics, creative problem solving, marketing concepts and ideas, and leadership image. Emphasis on leadership challenges, research findings on experimental exercises, and decisions involving applied leadership and management skills in health service organizations. PRQ: Consent of school.

535. PROBLEMS AND ISSUES IN ENVIRONMENTAL HEALTH (3). Analysis of contemporary environmental problems and issues related to public and community health. Topics include environmental toxicology; health risk assessment, management, and communication; air and water pollution control; solid and hazardous waste management; occupational health and diseases; and other miscellaneous topics. Discussion of the role of the environment in human health and disease, the basic principles of environmental health practice, and major issues in environmental health legislation and policy. PRQ: Consent of school.

540. HUMAN RESOURCE MANAGEMENT IN THE HEALTH CARE SETTING (3). Reading, discussion, and practice of techniques in the field of human resource management. Covers organizational practices to improve employee morale, health, motivation, and productivity.

550. WORKSHOP IN HEALTH SERVICES DELIVERY (1-3). Advanced workshop designed for students, community professionals, and health-related boards. The workshop will focus on the delivery of health care services in the field of health services delivery. Content varies to provide the opportunity to study current problems. May be repeated to a maximum of 12 semester hours. PRQ: Consent of school.

555. PRINCIPLES AND METHODS OF EPIDEMIOLOGY (3). Presentation and discussion of the principles and methods of the design, conduct, and interpretation of epidemiological studies. Focus is on the evaluation and analysis of the validity of findings from published epidemiological research. Examples from public health and biomedical literature will be used to illustrate concepts, methods, and interpretation. PRQ: BIOS 570 or consent of school.

575. HEALTH ECONOMICS FOR HEALTH SERVICES MANAGERS (3). A study of principles, concepts, and methods of economic analysis applicable to the U.S. health sector. Applications include special characteristics of health care as a commodity and of the patient as a consumer, health insurance; determinants of cost and utilization; and effects on performance of different market structures, regulatory policies, and payment mechanisms. PRQ: Consent of school.

585. INDEPENDENT STUDY (1-3). Independent study of current topics in allied health under faculty supervision. May be repeated to a maximum of 6 semester hours. S/U grading may be used. PRQ: Consent of school.

588. COMMUNITY HEALTH PROMOTION PROGRAMS (3). Experiential involvement with health promotion programming and wellness life styles. The case study approach will be used to reinforce the experiential component. PRQ: AHPH 520 and consent of school.

590. FINANCIAL DECISION MAKING FOR HEALTH SERVICES MANAGERS (3). Provides health services management students with an understanding of the financial management process of health services organizations. Emphasis is placed on the theory, principles, concepts, and tools necessary to participate in the financial management process of health services organizations. Emphasis is placed on analyzing and forecasting, budgeting, and other relevant topics. PRQ: BIOS 570 or consent of school.

591. INTERNSHIP IN PUBLIC HEALTH (1-9). Work individually in practical and clinical settings. May be repeated to a maximum of 12 semester hours. S/U grading. PRQ: Consent of school.

Department of Communicative Disorders (COMD)

Chair: Earl J. Seaver

Graduate Faculty

Robin Alvares, assistant professor, Ph.D., University of Texas, Dallas
James R. Andrews, professor, Ph.D., Northwestern University
Janet D. Dawson, professor, Ph.D., Northwestern University
Deborah L. Gough, assistant professor, Ed.D., Northern Illinois University
Kelly D. Hall, assistant professor, Ph.D., University of Illinois
Pamela L. Jackson, professor, Ph.D., Purdue University
Howard D. Schwartz, associate professor, Ph.D., Syracuse University
Earl J. Seaver, professor, Ph.D., University of Iowa
M. Irene Stephens, professor, Ph.D., Purdue University

The Department of Communicative Disorders offers a graduate program leading to the M.A. degree. The graduate program is adapted to the student's individual needs and academic background. Each student plans a program in consultation with an adviser from the graduate faculty of the department.

A student may pursue a specialization in speech-language pathology, audiology, or deafness rehabilitation counseling. The programs in speech-language pathology and audiology are accredited by the Council on Academic Accreditation, American Speech-Language-Hearing Association. The deafness rehabilitation counseling program is accredited by the Council on Rehabilitation Education.

Master of Arts in Communicative Disorders

Specialization in Audiology
Specialization in Deafness Rehabilitation Counseling
Specialization in Speech-Language Pathology

Admission

To be assured consideration for admission to the master's degree program in communicative disorders, prospective students must submit completed application materials (application forms, official transcripts, GRE General Test Scores, and letters of recommendation) to the Graduate School no later than March 1 for the summer and fall sessions, and October 1 for the spring session. Only complete applications containing all required data are considered.

Admission to the master's degree program is typically for full-time study. An applicant for admission to a departmental program is generally expected to meet or exceed the following requirements.

A minimum 3.00 GPA (on a 4.00 scale) in all undergraduate work.
Competitive scores on the GRE General Test.

Two letters of recommendation from professors, employers, or supervisors providing supportive evidence of an applicant's professional qualifications.

A typewritten statement describing the applicant's qualifications, goals, and career aspirations as they relate to the Department of Communicative Disorders at NIU.

Prospective students who fail to meet the GPA requirement for admission may request special consideration of their applications. Such requests must be in writing, must include compensatory evidence related to the deficiency, and should accompany the application for admission to the Graduate School. Final decisions regarding admissions are made by the program's admissions committee on the basis of a total profile of an applicant's qualifications.

It is necessary to limit graduate student admission in accordance with student/faculty ratio and the availability of practicum experience opportunities. Admissions to the specializations in audiology and deafness rehabilitation counseling are typically limited to the summer and fall terms; however, spring admission will be considered on an individual basis.

Requirements

The student must choose a specialization in speech-language pathology, audiology, or deafness rehabilitation counseling. With the advice and consent of the adviser, a student elects to earn a degree with or without a thesis. Student participation in practicum and internship courses requires both good academic standing and consent of the department.

Common Requirements

COMD 500, Introduction to Research in Communicative Disorders (3)

Completion of the minimum academic and clinical requirements for the appropriate professional certification issued by the American Speech-Language-Hearing Association or the Commission on Rehabilitation Counselor Certification prior to graduation

Fulfillment of an experience assignment during each semester of full-time registration. Such assignments will be of a research, clinical, or teaching nature, depending on the needs of the student and the availability of the assignment

One of the following specializations

Specialization in Audiology
Specialization in Speech-Language Pathology

The master's degree requires a minimum of 36 semester hours, at least 30 of which must be earned in nonpracticum courses. Additional semester hours are normally earned in clinical practicum to fulfill the requirements of the appropriate clinical certification.

Thesis Option

The student must earn a minimum of 36 semester hours of graduate credit. A thesis must be submitted and approved. A maximum of 6 semester hours may be allotted to thesis research and writing.

The student is normally required to pass a comprehensive oral examination which assesses knowledge and ability in the specialization in graduate study, but this may be waived at the discretion of the thesis committee.
Non-Thesis Option
The student must earn a minimum of 36 semester hours of graduate credit and pass a written and oral examination which will assess knowledge and ability in the specialization in graduate study.

Certification by the Illinois State Board of Education (Type 10, Special/Speech-Language Impaired) may be fulfilled by meeting the following requirements from the graduate and/or undergraduate curriculum.

General requirements for the Standard Special Certificate (K-12): Oral communication (3 semester hours); written communication (6 semester hours); mathematics (3 semester hours); biological and physical science (3 semester hours including one laboratory course); humanities (15 semester hours including 3 semester hours in U.S. history and 3 semester hours in English); social science (9 semester hours including 3 semester hours in U.S. government); health and physical development (2 semester hours). At least 3 semester hours must be taken in non-Western or third-world cultures from either the humanities or social science area.

Courses in professional education: 6-9 semester hours
Courses in psychology: 9 semester hours
Courses in normal aspects of speech and hearing: 16-18 semester hours
Courses in speech-language disorders: 28-30 semester hours
Courses in audiology: 7-9 semester hours
COMD 576, Organization and Planning of Speech, Language, and Hearing Services (3)
Practicum in the schools: 5 semester hours, with at least 100 clinical clock hours

Specialization in Deafness Rehabilitation Counseling
Because this program is fully accredited by the Council on Rehabilitation Education, a student who successfully completes the required curriculum, including a 800-hour internship under the supervision of a Certified Rehabilitation Counselor, is eligible to sit for the Commission on Rehabilitation Counselor Certification Examination.

COMD 492, Medical Aspects of Disability in Rehabilitation (3)
COMD 500, Introduction to Research in Communicative Disorders (3)
COMD 528, Developmental Aspects of Deafness and Disability (3)
COMD 560, Introduction to Vocational Rehabilitation (3)
COMD 562, Vocational Analysis and Job Placement with Hearing Impaired Persons (3)
COMD 582, Counseling Theories and Techniques with Deaf and Hard-of-Hearing People (3)
COMD 583, Psychological and Vocational Assessment with Deaf and Hard-of-Hearing People (3)
COMD 586, Clinical Procedures in Deafness Rehabilitation Counseling (1)
COMD 590, Practicum: Deafness Rehabilitation Counseling (3)
COMD 594, Internship in Deafness Rehabilitation Counseling (12)
COMD 677, Seminar: Deafness Rehabilitation Counseling (3)
EPCO 525, Counseling Skills and Strategies (3)
EPCO 530, Counseling Theories and Practices (3)
EPCO 540, Group Counseling Theories and Procedures (3)

If a graduate student in the deafness rehabilitation counseling specialization has already completed COMD 492 with a grade of B or better as an undergraduate at NIU, that course will not be required in the student's M.A. program.

The student must demonstrate proficiency in American Sign Language.

A basic course in audiometric methods, if not completed at the undergraduate level, is considered to be a deficiency and is added to the graduate program.

Students are required to complete a total of 400 approved professional development hours including direct involvement supervised counseling, professional meetings, and deaf community involvement.

Thesis Option
A thesis must be submitted and approved. Students selecting this option must also pass a comprehensive examination which includes a defense of the thesis.

Non-Thesis Option
Students selecting this option must pass an oral and written examination which will assess knowledge and ability in the specialization.

Course List

403. LANGUAGE DEVELOPMENT IN CHILDREN (3). Crosslisted as CIEE 403X. An overview of oral language acquisition including phonological, morphological, syntactic, semantic, and pragmatic development in children from infancy through adolescence.

420. HEARING PROBLEMS AND AUDIOMETRIC METHODS (3). An introduction to clinical audiology; etiology, diagnosis, and rehabilitation of auditory disorders. Observation and orientation in hearing testing. It is strongly advised that students complete COMD 325A and COMD 325B prior to enrollment in COMD 420. PRQ: COMD 323 or consent of department.

421. AURAL REHABILITATION (4). Methods and materials for communication assessment and training with the hearing impaired. Emphasis on receptive communication including speech-language, auditory training, and amplification systems. It is strongly advised that students complete COMD 326 prior to enrollment in this course. PRQ: COMD 221 and COMD 420, or consent of department.

423. ARTICULATORY AND PHONOLOGICAL DISORDERS (3). Disorders of speech sound production and use including evaluation and treatment procedures; observations and demonstrations. PRQ: COMD 221 and COMD 323. CRQ: COMD 403 or consent of department.

424. STUTTERING (3). An introduction to the identification and measurement of stuttering. Examination of theories of the onset and development of stuttering with some discussion of evaluation and treatment procedures.

425. NEUROPATHOLOGIES OF SPEECH AND LANGUAGE (3). Neurological bases of speech-language production and disorders including sensory organization, neuromotor control, central language mechanisms, and clinical syndromes associated with central and peripheral nervous system dysfunction. PRQ: COMD 323 or consent of department.

429. ASSESSMENT PROCEDURES IN COMMUNICATIVE DISORDERS (4). Fundamental concepts underlying the evaluation of communicative disorders. Emphasis on the selection, administration, and interpretation of tests and other assessment procedures, conducting interviews, and report writing. PRQ: COMD 420 and COMD 423, or consent of department.

430. AMERICAN SIGN LANGUAGE I (3). Development of receptive and expressive skills in American Sign Language. Emphasis on developing skills in a non-English syntax system, and communication with hearing impaired people in activities of daily living. Three hours of lecture and one hour of laboratory. PRQ: Consent of department.

431. AMERICAN SIGN LANGUAGE II (3). A continuation of COMD 430 emphasizing the improvement of communicative skills. Three hours of lecture and one hour of laboratory. PRQ: COMD 430 or consent of department.

432. AMERICAN SIGN LANGUAGE III (3). A continuation of COMD 431, with emphasis on developing fluency in American Sign Language. Three hours of lecture and one hour of laboratory. PRQ: COMD 431 or consent of department.

475. NOISE AND ITS EFFECTS ON HUMANS (3). Evaluation and practical application of noise measurement systems. Examination of noise as it affects humans. Includes information on hearing conservation programs designed to meet current governmental regulations. PRQ: COMD 420 or consent of department.
476. CHILD LANGUAGE DISORDERS (3). Assessment of and intervention with the high incidence population of otherwise-normal language impaired children from infancy through adolescence including those from multicultural backgrounds. PRQ: COMD 403 or consent of department.

481. WORKSHOP: AMERICAN SIGN LANGUAGE (1). Opportunities to increase sign language comprehension and expressive abilities through activities and training exercises. Workshop format is non-verbal. Emphasis on active student participation.

491. MICROCOMPUTER USES IN COMMUNICATIVE DISORDERS (3). An overview of microcomputer applications in the assessment and treatment of speech and hearing disorders, and related production of reports, data, and files. The use of appropriate software available in the field of clinical evaluation, therapy exercises, report writing, and clinical data files. Development of clinically oriented programs in BASIC language.

492. MEDICAL ASPECTS OF DISABILITY IN REHABILITATION (3). A rehabilitative perspective on the structure of medicine in the United States, medical specialties, medical terminology, and the medical examination. Survey of select body systems, functions, basic etiologies, pathologies, and treatments intended to provide the rehabilitation counselor with basic information with which to determine eligibility and interpret case-related medical reports.

493. COUNSELING IN COMMUNICATIVE DISORDERS (3). Counseling principles and techniques as related to assessment, treatment, parent conferences, staffings, and eliciting parent/client cooperation.

494. WORKSHOP IN COMMUNICATIVE DISORDERS (1-3). The application of principles of communicative disorders or rehabilitation to problems of special interest to the participant. May be repeated to a maximum of 9 semester hours.

495. FAMILIES AND COMMUNICATIVE DISORDERS: A REHABILITATIVE PERSPECTIVE (3). The application of systemic etiopathology to the habilitation and rehabilitation of persons with communicative disorders. Survey of major family and hearing disorders, and related production of interdisciplinary treatment concepts, models, and techniques as applied to communicative disorders and deafness rehabilitation counseling. Opportunity to develop a personally useful model of family-focused intervention.

500. INTRODUCTION TO RESEARCH IN COMMUNICATIVE DISORDERS (3). A study of the research areas in communicative disorders including sources of reference, research design, and the formats of professional writing. Current professional issues will also be considered. PRQ: Admission to the graduate program in communicative disorders.

502. ORAL-MOTOR FUNCTION IN CHILDREN: ASSESSMENT AND TREATMENT (3). Identification of and intervention for disorders of the oral-motor system affecting feeding, pre-speech, and speech. Topics include motor development for feeding and speech, identification of problems within the motor system during feeding and speech production, treatment strategies, transdisciplinary roles of the speech and language pathologist, and family service delivery. PRQ: COMD 425 and COMD 429 or consent of department. CRQ: COMD 587 or consent of department.

503. EARLY INTERVENTION IN COMMUNICATION DISORDERS (3). Identification of and intervention for communication disorders in children ages birth to three years and their families. Topics covered will include the speech-language pathologist's role in interdisciplinary and transdisciplinary assessment, communication intervention techniques, models of delivery, relevant legislation, and speech and language resources available to families and service providers. PRQ: COMD 403 and COMD 429, or consent of department.

504. CHILD LANGUAGE DISORDERS: SPECIAL POPULATIONS (3). Assessment procedures for and intervention with children with physical and/or cognitive impairments. Topics covered include models of intervention for individuals with autism, mental retardation, and developmental delays and toddlers at risk for developmental disorders. Use of augmentative and alternative communication systems will be studied. Additional topics may include communication programming for children with syndromes, traumatic brain injury, multiple disabilities, LEP language impairment, and selective mutism. PRQ: COMD 476 or consent of department.

524. SUPERVISORY TECHNIQUES IN SPEECH AND HEARING SERVICES (3). Provides insights, techniques, and approaches to develop competence necessary for the supervision of speech, hearing, and language services. Emphasis on information on supervision in public school, hospital, therapy center, and other agency programs.

525. ADVANCED HEARING SCIENCE (3). Normal and abnormal auditory processes, advanced psychoacoustics, development of the auditory mechanism, and speech perception. Study of clinical measures and procedures. PRQ: COMD 527 and COMD 577, or consent of department.

526. ADVANCED SPEECH SCIENCE (3). Advanced study of the acoustical, physiological, and perceptual aspects of speech. Laboratory projects will be assigned. PRQ: COMD 326A and COMD 326B, or consent of department.

527. ANATOMY AND PATHOLOGY OF THE EAR (3). The study of the anatomical aspects of the human auditory system. The major divisions of the auditory system as a function of the embryonic development and the morphological development as they relate to the normal system and the pathological system. PRQ: COMD 323 or consent of department.

528. DEVELOPMENTAL ASPECTS OF DEAFNESS AND DISABILITY (3). The impacts of hearing impairment on the developmental, educational, personal, familial, social, and vocational aspects of life. Focus of study includes the deaf, hard-of-hearing, and multiply-disabled populations. PRQ: Consent of department.

529. HEARING INSTRUMENTS (3). Theories and procedures used in selection, evaluation, and fitting of hearing instruments. Types and components of electroacoustic hearing instruments and earmold acoustics. Laboratory experience in making earmolds: selection, fitting, evaluation, and repair of hearing instruments. CRQ: COMD 577 or consent of department.

530. ADVANCED AURAL REHABILITATION (3). Selected topics in aural rehabilitation with emphasis on the receptive and expressive aspects of communicative problems exhibited by children and adults with impaired hearing. Discussion will center on diagnostic and rehabilitative techniques. PRQ: COMD 421 or consent of department.

533. ADVANCED CLINICAL PHONOLOGY (1-3). Selected topics in the study and application of a systemic paradigm to therapeutic intervention in speech-language pathology and audiology in a variety of venues. PRQ: COMD 425 or consent of department.

547. INSTRUMENTATION FOR COMMUNICATIVE DISORDERS (3). Theoretical communicative disorders and practical aspects of electronic audio-frequency laboratory equipment commonly used for evaluation and research in speech pathology and audiology.

560. VOCATIONAL REHABILITATION AND INDEPENDENT LIVING (3). The historical and legislative development of vocational rehabilitation and independent living services are described, with emphasis on the provision of rehabilitative and independent living services for people with disabilities.

562. VOCATIONAL ANALYSIS AND JOB PLACEMENT OF HEARING IMPAIRED PERSONS (3). Study of the basic theory, methods, and techniques for obtaining and maintaining employment of hearing impaired rehabilitation clients. Emphasis on job readiness, job development, vocational analysis, and job accommodation. PRQ: Consent of department.

570. VOICE DISORDERS: RESEARCH AND THERAPY (3). Discussion and review of the literature bearing on the theory, etiology, and treatment of voice disorders. PRQ: Consent of department.

571. ADVANCED CLINICAL PHONOLOGY (1-3). Selected topics in the acquisition, assessment, and treatment of phonological disorders in children with emphasis on case presentations. May be repeated to a maximum of 5 semester hours. PRQ: COMD 423 and consent of department.

572. CRANIOFACIAL ANOMALIES (3). The study of craniofacial anomalies including cleft lip with and without cleft palate, embryological development of the craniofacial complex, language and hearing problems, and other associated difficulties accompanying craniofacial dysmorphology. Principles of assessment, treatment, and research are included.

573. CEREBRAL PALSY (3). The study of communication problems associated with neuromuscular disorders with a focus on cerebral palsy. PRQ: COMD 425 or consent of department.
574. COGNITIVE-LINGUISTIC DISORDERS OF NEUROLOGICALLY IMPAIRED ADULTS (3). The study of neuropathologies and neuropsychological models of aphasia and cognitive-linguistic impairments accompanying head injury and right hemispheric lesions. Principles of differential diagnosis, treatment, and research. PRQ: COMD 425 or consent of department.

575. PEDIATRIC AUDIOLOGY (3). The significance of early detection of auditory disorders in the young child. Methods, techniques, and procedures used in obtaining audiological diagnosis of the auditory system of the pediatric case. PRQ: COMD 420 or consent of department.

576. ORGANIZATION AND PLANNING OF SPEECH, LANGUAGE, AND HEARING SERVICES (3). Aspects of conducting a program for communicative disorders in various settings including public schools, hospital and service clinics, and private practice. A study of current trends affecting the delivery of services in each of those areas.

577. AUDIOLOGIC ASSESSMENT I (3). Administration and interpretation of the standard audiometric battery, as well as discussion of the specialized tests of auditory function (Bekesy, SISI, tone decay, etc.). PRQ: Consent of department. Recommended: COMD 420.

578. AUDIOLOGIC ASSESSMENT II (3). Continuation of COMD 577 with emphasis on other specialized tests of auditory function (evoked-response audiometry, auditory evoked responses, electrodermal testing, etc.). PRQ: COMD 420 and COMD 577, or consent of department.

579. ELECTROPHYSIOLOGIC ASSESSMENT OF THE AUDITORY SYSTEM (4). Neuroanatomic and neurophysiological bases of auditory evoked responses; administration and interpretation of the procedures used in evoked response testing; and relationship between pathology and evoked response results. Laboratory experience will be provided. PRQ: COMD 527 and COMD 577, or consent of department.

580. EVALUATION AND TREATMENT FOR BALANCE DISORDERS (3). Anatomy, physiology, neurology, and pathologies of the proprioceptive vestibular system; central equilibrium mechanisms; instrumentation, and procedures involved in evaluation of balance function; treatment for persons with equilibrium disturbances. PRQ: COMD 527 and COMD 579, or consent of department.

581. CENTRAL AUDITORY PROCESSING (3). Discussion of central nervous system processing leading to perception of an auditory event. Neurological bases of auditory perception, speech perception, understanding of language, normal and abnormal processing strategies, and neurological disorders. Evaluation of normal and abnormal central auditory processing and treatment of central auditory processing disorders. PRQ: COMD 425, COMD 527, and COMD 577, or consent of department.

582. COUNSELING THEORIES AND TECHNIQUES WITH DEAF AND HARD-OF-HEARING PEOPLE (3). Application of basic counseling theory to the unique problems of serving deaf and hard-of-hearing clients. Emphasis on problem-solving in the areas of counseling and vocational counseling as well as basic elements of program development. PRQ: EPCO 530 or consent of department.

583. PSYCHOLOGICAL AND VOCATIONAL ASSESSMENT WITH DEAF AND HARD-OF-HEARING PEOPLE (3). Application of basic principles of standardized testing and evaluation to serving deaf and hard-of-hearing people. Emphasis on the unique problems of selecting, administering, norming, and integrating test results for deaf and hard-of-hearing people. PRQ: COMD 528 or consent of department.

584. SPEECH AND SWALLOWING DISORDERS IN HEAD AND NECK CANCER PATIENTS (3). The study of speech and swallowing disorders in head and neck cancer patients following surgical and medical intervention. Emphasis on the role of the speech-language pathologist in the areas of counseling, dysphagia, artificial larynges, and alaryngeal and tracheo-esophageal speech. PRQ: Consent of department.

585. AUDIOLOGY PRACTICUM: SPEECH AND HEARING CLINIC (1). Observation, practice, and discussion of diagnostic and rehabilitative audiological procedures. All students involved in on-campus practicum in audiology must enroll in this course. May be repeated to a maximum of 6 semester hours. PRQ: COMD 420 or consent of department.

586. CLINICAL PROCEDURES IN DEAFNESS REHABILITATION COUNSELING (1). Observation, discussion, and practice of clinical procedures employed in rehabilitation counseling with persons who have hearing impairments. All students involved in an on-campus practicum in deafness rehabilitation counseling must enroll in this course. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

587. SPEECH-LANGUAGE PRACTICUM: SPEECH AND HEARING CLINIC (1). Observation, discussion, and clinical practice of assessment and therapeutic procedures. All majors involved in on-campus practicum in speech-language pathology must enroll in this course. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

588. COGNITIVE-COMMUNICATION DISORDERS ASSOCIATED WITH TRAUMATIC BRAIN INJURY (2). Neurobehavioral sequelae and the physiological and audiologic consequences of brain trauma. The spectrum of intervention from speech, language and cognitive assessment, to treatment and carryover.

589. PRACTICUM: DEAFNESS REHABILITATION COUNSELING (3). Supervised practicum in deafness rehabilitation counseling in external settings that include vocational rehabilitation programs. PRQ: Consent of department.

590. SPEECH-LANGUAGE PRACTICUM: SCHOOLS (1-12). Includes assessment and intervention experience in speech-language services in the school setting. Five semester hours of credit will meet the minimum clinical clock-hour requirement in schools for Illinois School Certification. The course may be repeated to a maximum of 12 semester hours. It is expected that students have a minimum of 175 hours of clinical contact prior to enrollment in this course. PRQ: COMD 476, COMD 576, and a minimum of 4 semester hours in COMD 587, or consent of department.

592. SPEECH-LANGUAGE PRACTICUM: HOSPITALS/CLINICS (1-12). Advanced practicum in speech and language assessment and treatment in hospital and clinic settings. May be repeated to a maximum of 12 semester hours. It is expected that students have a minimum of 175 hours of clinical contact prior to enrollment in this course. PRQ: COMD 574, COMD 584, and a minimum of 4 semester hours in COMD 587.

593. ADVANCED PRACTICUM: AUDIOLOGY (1-15). Advanced practicum in audiologic assessment and management in an external setting. May be repeated to a maximum of 15 semester hours. PRQ: COMD 585 or consent of department.

594. INTERNSHIP IN DEAFNESS REHABILITATION COUNSELING (1-12). A clinical experience in a rehabilitation or related facility, where the student will perform the functions of a counselor with clients who are deaf or hard of hearing under the direct supervision of both faculty and qualified staff in the placement site. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

595. DIRECTED INDIVIDUAL STUDY (1-6). Independent pursuit of advanced problems in communicative disorders of special concern to qualified graduate students. May be repeated to a maximum of 6 semester hours. PRQ: Consent of the student's adviser.

596. SEMINAR IN HEARING INSTRUMENTS (3). Advanced study of research in amplification systems including speech, perception, psychoacoustics, and design consideration of hearing instruments. PRQ: COMD 520 or consent of department.

597. EXPERIMENTAL PHONETICS: PRODUCTION PROCESSES (3). The acoustic and psychoacoustic foundations associated with the perception and production of speech. Laboratory experimentation. PRQ: Consent of department.

598. EXPERIMENTAL PHONETICS: PERCEPTION PROCESSES (3). The acoustic and psychoacoustic foundations associated with the perception of oral communication. Laboratory experimentation. PRQ: Consent of department.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours. PRQ: Consent of the student's adviser.

600. SEMINAR IN LANGUAGE (3). Crosslisted as COMS 672X. Theories and research on speech and language acquisition from infant vocalizations to the decoding and encoding of abstract concepts; description, measurement, and analysis of normal and variant language patterns. May be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

601. SEMINAR IN AUDIOLOGY (3). Special topics in audiology. May be repeated to a maximum of 9 semester hours. PRQ: COMD 578 or consent of department.

602. ADMINISTRATION OF SPEECH AND HEARING PROGRAMS (3). A consideration of the basic business and professional principles essential to the operation of a speech and hearing program. Includes study of professional personnel management, budget and finance, plant management and development, and public relations and education.
675. SEMINAR: SPEECH-LANGUAGE PATHOLOGY (1-3). Selected topics in speech-language pathology. May be repeated, but only 6 semester hours may be applied toward the M.A. degree. PRQ: Consent of department.

676. SEMINAR: SPEECH SCIENCE (3). Selected topics in the normal functioning of the speech mechanism and the perception of speech. May be repeated to a maximum of 9 semester hours. PRQ: COMD 326 and COMD 670, or consent of department.

677. SEMINAR: DEAFNESS REHABILITATION COUNSELING (3). The dynamics of hearing impairment and the professional's role in this area. Selected topics on the provision of rehabilitative services to the hearing impaired will be generated and selected by the students. May be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

684. PEDIATRIC SWALLOWING DISORDERS (3). Assessment and treatment of pediatric swallowing disorders including neurodevelopment, normal anatomy and physiology of swallowing, respiratory and gastroenterologic issues related to swallowing, clinical oral motor and feeding assessment, videofluoroscopic evaluation of swallowing, and management of pediatric swallowing disorders.
School of Family, Consumer, and Nutrition Sciences (FCNS)

Chair: Mary E. Pritchard

Graduate Faculty

Mary Andrews, coordinator, Family Center, M.S., Northern Illinois University
Brent J. Atkinson, associate professor, Ph.D., Texas Tech University
Susan P. Bowers, assistant professor, Ph.D., Ohio State University
Linda E. Derscheid, associate professor, Ph.D., University of Iowa
Shi-Reui Sherry Fang, assistant professor, Ph.D., Michigan State University
Julie Johnson-Hillery, assistant professor, Ph.D., University of Wisconsin
Julie Johnson-Hillery, assistant professor, Ph.D., University of Wisconsin
Robert E. Keim, professor, Ph.D., Florida State University
Sondra King, associate professor, Ph.D., Kansas State University
Yoon Hee Kwon, professor, Ph.D., University of Wisconsin
Lan Li, assistant professor, Ph.D., Virginia Polytechnic Institute and State University
Michael J. Martin, professor, Ph.D., University of Georgia
Eilleen E. Parham, professor, Ph.D., University of Tennessee
Aimee D. Prawitz, assistant professor, Ph.D., Louisiana State University
Mary E. Pritchard, professor, Ph.D., Purdue University
Laura S. Smart, associate professor, Ph.D., University of Connecticut
Josephine Umoren, associate professor, Ph.D., University of Nebraska
Linda J. Wark, associate professor, Ph.D., Purdue University

The School of Family, Consumer, and Nutrition Sciences offers graduate programs leading to the M.S. degree in applied family and child studies and in nutrition and dietetics. The school 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.

A student pursuing an advanced degree in the School of Family, Consumer, and Nutrition Sciences is expected to meet the requirements of a major area. Deficiencies in the major area at the undergraduate level will be determined by a committee of graduate faculty and must be made up as directed by the committee.

Students-at-large intending to take courses required by the programs in applied family and child studies or in dietetics, nutrition, and food systems should meet with the appropriate program coordinator.

Admission requirements and information regarding notification of a decision on admission are indicated below for each area of study. Prior to initial registration, each student planning a major in family, consumer, and nutrition sciences should consult with the graduate advisor.

Requirements

This program requires a minimum of 30 semester hours.

EPSY 521, Educational Statistics I (3),
OR EPSY 522, Educational Statistics II (3),
OR BIOS 570, Biostatistical Analysis (3),
OR PSYC 504, Advanced Psychological Statistics (3)

Master of Science
In Applied Family and Child Studies

This major provides professional career enhancement for advanced graduate work and research, secondary and college teaching, and programming and administration in family social services and child development settings in community and government agencies, including youth work, gerontological programming, child life programs in hospitals, infant and child care programs, family support services, and family life and parenting education.

A program of courses is developed cooperatively by the student and an adviser. In addition to taking the required courses, the student may focus on an individualized area of interest through the selection of courses within and outside the school.

Students-at-large intending to take courses required by this program should meet with the program coordinator.

Within the major, there is also the opportunity to specialize in marriage and family therapy.

Admission

Upon admission into the program, students are required, within 30 days, to notify the area coordinator in writing of their intention to register for classes in the term for which they were admitted. Failure to do so may result in cancellation of admission.

An applicant is required to have a minimum of 9 semester hours of undergraduate courses in family and child studies, or the equivalent including a course in family relations and one in child or lifespan development. Three of the 9 hours must be at the upper-division level. A student may be required to make up deficiencies in the area of family and child studies by successfully completing designated courses. These deficiency courses should be completed during the first semester after admission to the major. Failure to do so may result in removal from the program.

The maximum combined total of student-at-large hours plus transfer credit used in the degree program may not exceed 12 semester hours. For course work taken while a student-at-large, no more than 6 semester hours taken in the school and 6 hours outside of the school may be used in the degree program. Exceptions to these limits may be approved in special cases by the coordinator of the applied family and child studies faculty, provided that the Graduate School limit of transfer credit is not exceeded.

Since admission/enrollment in the major is limited, declared majors in the applied family and child studies program have priority for course enrollment. In such cases, students-at-large may not be allowed to enroll in some courses, or may be dropped from courses in the school within the graduate student drop period.
FCNS 500B, Seminar: Family and Child Studies (3)
FCNS 504, Research Methods (3)
Course work from the following (3-9)
FCNS 431A, Internship: Child Development (3), OR FCNS 431B, Internship: Family Services (3)
(See "Special Requirements" below.)
FCNS 539B, Practicum: Family Therapy (9) (Enrollment limited to students admitted to the specialization in marriage and family therapy)
FCNS 599A, Thesis (6)
FCNS 610, Teaching College-Level Family, Consumer, and Nutrition Sciences (6)
A 3-semester-hour course on social science research methodology, or statistics.
Three or four of the following including at least one 500-/600-level course (9-12)
FCNS 432, Theories of Child Development (3)
FCNS 434, Administration and Supervision of Programs for Young Children (3)
FCNS 437, Parent-Child Interaction From Birth to Six Years (3)
FCNS 438, Parent Education (3)
FCNS 439, Infant Development in the Family (3)
FCNS 445, Management of Human and Family Resources (3)
FCNS 484, Advanced Family Relationships (3)
FCNS 486, Programming for and administration in family social services (3)
FCNS 489B-E, Topical Issues in Family and Child Studies (3)
FCNS 535, Behavior Assessment of the Infant and Young Child (3)
FCNS 537, The Child in the Family (3)
FCNS 584, The Family with Adolescents (3)
FCNS 585, Family Stress and Structural Diversity (3)
FCNS 589, Readings in Family and Child Studies (3)
FCNS 684, Theoretical Foundations of Family Therapy (3)
Additional courses with approval of the adviser (6)

Students may fulfill the above requirements by completing various sequences of courses which develop professional competencies in specific areas including, but not limited to, the following areas of study:
- Programming for and administration in family social services with emphasis on youth work: FCNS 500B, FCNS 504, analytical and applied course requirements listed above, FCNS 438, FCNS 584, FCNS 585, and 6 semester hours of electives.
- Programming for and administration in child development settings, including hospitals: FCNS 500B, FCNS 504, analytical and applied course requirements listed above, FCNS 434 or FCNS 445, FCNS 437, FCNS 537, and 6 semester hours of electives. It is recommended that students have a baccalaureate degree in child development or a related area including upper-division courses comparable to FCNS 390, FCNS 331, FCNS 331A, FCNS 439, and FCNS 490.
- Programming for and administration in family social services with study in gerontology: FCNS 500B, FCNS 504, analytical and applied course requirements listed above, FCNS 486, FCNS 585, and 6 semester hours of electives. (Consult the gerontology program listing elsewhere in this catalog.)
- Preparation for advanced graduate work: FCNS 500B, FCNS 504, FCNS 599A, EPSY 522 or BIOS 570 or PSYC 504, FCNS 432, FCNS 537 or FCNS 584, FCNS 585, and 6 semester hours of electives.
- Enhancement for secondary and college teaching: FCNS 500B, FCNS 504, FCNS 610, and other analytical and applied course requirements listed above, FCNS 432, FCNS 537, FCNS 585, and 6 semester hours of electives.

Special Requirements for FCNS 431A
Prerequisites for enrollment in the child development internship, FCNS 431A, are (1) previous full-time employment for at least one year in a licensed early childhood program or other professional setting related to young children and their families, or the equivalent of the following: supervised on-campus internship (FCNS 490), both guidance and planning courses (FCNS 390, FCNS 331, and FCNS 331A), a parent-child interaction course (FCNS 437), and an early childhood professional programs course (FCNS 434); (2) attendance at the scheduled internships meetings; and (3) consent of school.

Special Requirements for FCNS 431B
Prerequisites for enrollment in the family services internship, FCNS 431B, are (1) previous employment for at least one year in a social service setting, or the equivalent of 50 hours of approved volunteer work, a group process class (FCNS 382 or EPSC 540), and a professional issues class (FCNS 489A or FCNS 592); (2) completion of FCNS 684 for internships in therapy settings; and (3) consent of school.

Specialization in Marriage and Family Therapy
The specialization in marriage and family therapy, accredited by the Commission on Accreditation for Marriage and Family Therapy Education, emphasizes the practical application of systemic family therapy principles to the diagnosis and treatment of problems in human relationships. Through extensive course work, clinical experience with client couples and families, and supervision by approved supervisors of the American Association for Marriage and Family Therapy, students in the specialization learn to integrate theory and research while developing the clinical skills of marriage and family therapists. The specialization prepares students to function in mental health, family service, hospital business, and human service settings, and upon graduation students have completed all requirements for associate membership in the American Association for Marriage and Family Therapy.

Application Process
The specialization in marriage and family therapy admits a limited number of students once a year in the spring semester. Eligible candidates for the specialization will be selected only from persons who have first applied for and been admitted to the M.S. program in applied family and child studies (without specialization), fulfilling the prerequisites noted above. Therefore, applicants to the specialization must complete two separate application packets: the Graduate School application for admission to the M.S. program with a major in applied family and child studies (without specialization), and the school's application portfolio for the specialization.

The Graduate School application must be obtained directly from and submitted to the Graduate School. The specialization application portfolio must be obtained from and returned to the coordinator of the specialization, and the school's application portfolio must be obtained from and returned to the Graduate School. The specialization, specialization in marriage and family therapy, School of Family, Consumer, and Nutrition Sciences, Northern Illinois University, DeKalb, Illinois 60115-2854.

Completed Graduate School applications must be submitted by January 15 to the Graduate School, and specialization applications must be submitted to the coordinator of the specialization by January 15. Late applications will be considered only if space is available. Once admitted to both the graduate major in applied family and child studies and the specialization in marriage and family therapy, students may begin courses in the summer or fall term.

Admission requirements and procedures for the specialization in marriage and family therapy are fully described in an admission portfolio that is available from the program coordinator. Except in extraordinary circumstances, applicants must be available for a personal interview with the clinical faculty of the specialization.

Requirements
EPSY 521, Educational Statistics I (3), OR EPSY 522, Educational Statistics II (3), OR BIOS 570, Biostatistical Analysis (3), OR PSYC 504, Advanced Psychological Statistics (3), OR another 3-semester-hour course in social science research methodology or statistics approved by the chair of the graduate faculty (3)
FCNS 550B, Seminar: Family and Child Studies (3)
FCNS 550C, Seminar: Marriage and Family Therapy (9)
FCNS 5504, Research Methods (3)
FCNS 559B, Practicum: Family Therapy (9)
FCNS 592, Professional Issues in Family Therapy (3)
FCNS 595, Strategies of Family Therapy (3)
FCNS 684, Theoretical Foundations of Family Therapy (3)
Three of the following (9)
FCNS 438, Parent Education (3)
FCNS 486, Aging and the Family (3)
FCNS 489C, Topical Issues in Family and Child Studies: Child Abuse and Neglect (3)
FCNS 490D, Topical Issues in Family and Child Studies: Working with Ethnically Diverse Children and Families (3)
FCNS 537, The Child in the Family (3)
FCNS 584, The Family with Adolescents (3)
FCNS 585, Family Stress and Structural Diversity (3)
FCNS 589, Readings in Family and Child Studies (3)

In addition to the comprehensive examination, students are required to pass an oral examination which assesses their knowledge of the theory and practice of marriage and family therapy. This examination is usually taken in the term prior to graduation.

Students must complete a minimum of 45 semester hours in the program for graduation. This includes 500 supervised clinical contact hours completed within the field of marriage and family therapy. This may be done through required course work and work experience or internship.

Master of Science in Nutrition and Dietetics

The M.S. in nutrition and dietetics is designed to prepare students interested in community nutrition to work as registered dietitians in a variety of public and private health organizations in county, state, and government agencies or as patient-care dietitians in hospitals and other health-care settings. The program also prepares students to continue their studies in doctoral programs.

Students in this program may select additional courses in biology, chemistry, biochemistry, and psychology for a concentration in biochemistry or biophysics. (For details, see "Center for Biochemical and Biophysical Studies.")

Students planning to qualify for the Registration Examination of the American Dietetic Association must meet both academic and experience requirements. Completion of the Dietetic Practicum may be used to satisfy the experience requirements. The academic requirements for the Didactic Program in Dietetics (DPD) of the American Dietetic Association must be completed before students initiate the practicum hours. A list of courses may be obtained from the student's adviser. Any deficiency in courses required for admission must be removed within the time limitation determined by the admission committee.

Students-at-large intending to take courses required by this program should meet with the program coordinator.

Admission

Applicants are required to have completed a Didactic Program in Dietetics (DPD) or have had courses in general chemistry, organic chemistry, biochemistry, microbiology or bacteriology, human biology, human physiology, science of nutrition, applied nutrition, two semesters of nutrition in clinical care, principles of food preparation, and statistics. A minimum 3.00 GPA in these courses is required. Applicants will be admitted according to the vacancies in the program. Vacancies are determined by the number of graduate students completing degrees each semester. Applicants with the highest GPA and GRE scores will be given priority for available positions.

A combined total of no more than 15 semester hours of graduate credit earned as a student-at-large plus transfer hours will be counted toward the M.S. degree.

The majority of vacancies in the program are filled shortly after February 15 for summer session, April 15 for fall semester, and September 15 for spring semester.

Requirements

Students must complete a minimum of 32 semester hours in the program for graduation.

EPSY 522, Educational Statistics II (3),
OR BIOS 570, Biostatistical Analysis (3),
OR PSYC 504, Advanced Psychological Statistics (3)
FCNS 500A, Seminar: Nutrition and Dietetics (2)
FCNS 504, Research Methods (3)
FCNS 55, Macronutrients (3)
FCNS 546, Micronutrients (3)
FCNS 599A, Thesis (6)
One of the following (3)
FCNS 516, Nutritional Factors in Obesity and Eating Disorders (3)
FCNS 553A, Nutrition in Growth and Human Development: Maternal and Child Nutrition (3)
FCNS 553B, Nutrition in Growth and Human Development: Nutrition and Physical Activity (3)
FCNS 553C, Nutrition in Growth and Human Development: Geriatic Nutrition (3)
Three semester hours selected in consultation with the assigned graduate program adviser (3)
One of the following (3)
AHPH 445, Community Health Promotion (3)
AHPH 492, Behavioral and Social Aspects of Public Health (3)
EPCO 525, Counseling Skills and Strategies (3)
FCNS 410, Community Nutrition (3)
PSYC 417, Principles of Behavior Modification (3)
Two of the following (5-6)
AHPH 500, Health Care Delivery in the U.S. (3)
AHPH 530, Health Services Management (3)
AHPH 540, Human Resource Management in the Health Care Setting (3)
AHPH 575, Health Economics for Health Services Managers (3)
FCNS 551, Workshop in Dietetic Practice: Standards, Strategies, and Skills (2)
SOC1 475, Health Organizations and Delivery of Services (3)

Dietetic Internship

The dietetic internship offers additional experiences in dietetic practice; completion fulfills the experience requirements to qualify to take the Registration Examination in Dietetics. The internship is accredited through the American Dietetic Association (ADA) and is available only to majors in nutrition and dietetics.

The internship involves four terms: an orientation term in which the student takes an internship workshop, FCNS 551A, and course work toward the degree and two semesters and a summer during which the student spends 20-40 hours per week in practice sites and continues graduate study. Students in the internship must have completed at least 9 semester hours toward the degree before they can be placed in a practice site, ordinarily these hours are taken during the orientation term.
Admission

Admission is limited and competitive; admission to the major does not constitute admission to the internship. Although a student may apply for admission to the internship while acceptance to the major is pending, internship acceptance cannot be finalized until the student is accepted into the major.

Applicants must have completed the academic requirements for the DPD of the ADA. A B average in key course work is required. These courses are identified in the applications packet.

Applicants must be certified in food sanitation and must have successfully completed 150 clock hours of experience in dietetics including both food service and clinical nutrition. This experience may be paid or volunteer.

Students may apply in the fall or spring semester. Applicants should inquire about application deadlines. Applications will be screened and ranked with the highest ranking applicants being invited to interview. Following the interviews, students are matched to this program through the ADA computer-matching process. Late applicants will be considered if openings are available after computer matching.

Requirements

In addition to the courses required for the M.S. in nutrition and dietetics, including FCNS 551 (2), students electing the practicum must complete the following.

FCNS 431C, Internship: Dietetics, Nutrition, and Food Systems (8)
FCNS 539C, Practicum: Food Systems Management (5)
FCNS 539D, Practicum: Nutrition Care in Dietetics (11)

Secondary Teacher Certification in Family and Consumer Sciences/Home Economics

The certification program in the School of Family, Consumer, and Nutrition Sciences meets or exceeds minimum requirements of the Illinois State Board of Education (ISBE) for secondary certification in family and consumer sciences/home economics. Consequently, students completing the requirements will be recommended for certification under ISBE entitlement. Students with a baccalaureate degree from an accredited institution interested in secondary teacher certification must be admitted to the university as a post-graduate, student-at-large, or a graduate student. Admission to a degree program does not guarantee admission to the certification program.

Applicants must maintain a minimum 2.50 GPA in all undergraduate courses and a minimum 3.00 GPA in graduate courses.

Students seeking transcript evaluation and advisement from the teacher certification adviser at the earliest possible date.

Application for admission to the teacher certification program, which is required for enrollment in preclinical experiences.

Students must complete the plan of courses.

Applicants must complete all requirements for teacher certification including early childhood, methods courses, student teaching, and at least one course in four of the six areas in home economics; human development-child development; interpersonal and family relationships and parenting; consumer and resource management; housing-interiors-furnishings-living environment; foods and nutrition; and clothing, textiles, and fashion. A minimum of 32 semester hours in the school is required.

Students must pass the Illinois Teacher Certification Examination.

Course List

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: Graduate standing or consent of school.

408. CURRENT PROBLEMS AND TRENDS IN NUTRITION AND FOODS (3). Readings in and discussion of selected classic studies and recent developments in the field of nutrition and foods. Implications for dietitians, nutritionists, teachers, extension workers and others. PRQ: Consent of school.

410. COMMUNITY NUTRITION (3). Nutrition problems, practices, and programs in the community. Observation and participation in local programs. PRQ: Consent of school. Recommended: FCNS 310.

424. CULTURAL AND NATIONAL FOOD PATTERNS (3). Food practices as influenced by social, cultural, and economic factors. PRQ: Consent of school.

428. EXPERIMENTAL FOODS (3). Application of scientific method in the study and design of experimental food problems. Development of evaluative and laboratory research techniques through group and individual projects. PRQ: FCNS 200A, FCNS 200B, and CHEM 370; or consent of school.


434. ADMINISTRATION AND SUPERVISION OF PROGRAMS FOR YOUNG CHILDREN (3). Planning the total program: the administration and supervision of various types of group care for children under six. Work with inservice training, volunteers, personnel, and financial problems. PRQ: FCNS 230 or FCNS 230A, or consent of school.

437. PARENT-CHILD INTERACTION FROM BIRTH TO EIGHT 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: 6 semester hours in child development and/or family relations or consent of school.

438. PARENT EDUCATION (3). Basic principles in organization, formulation, and presentation of parent study programs. Experience in ways of working with parents of children from preschool through adolescence. Uses of group dynamics and mass media. PRQ: A course in child or adolescent development, or consent of school.

439. INFANT DEVELOPMENT IN THE FAMILY (3). The infant in the context of the family. Opportunity to become familiar with major scientific findings concerning prenatal and postnatal development of the child from conception through the first two years of life. Integration of this information through observation, laboratory experience, and home visits. PRQ: FCNS 230 or consent of school.

445. MANAGEMENT OF HUMAN AND FAMILY RESOURCES (3). The management process applied to resource allocation by individuals, families, and other units within a dynamic social and economic environment. PRQ: Consent of school.

452. APPAREL DESIGN I (3). Apparel design through the fundamental principles and processes of flat pattern methods. Emphasis on the development of a master pattern and original design. May be repeated once for advanced projects. PRQ: FCNS 252 or consent of school.

*Postgraduate students should see the Undergraduate Catalog for initial teacher certification requirements.
453. EXPERIMENTAL TEXTILES (3). Standard textile testing methods used in determining the physical and chemical characteristics of fibres, yarns, and fabrics, and the statistical methods employed in data analysis and evaluation. PRQ: FCNS 152, FCNS 351, and CHEM 110A, or consent of school.

454. APPAREL DESIGN II (3). Draping based upon the interrelating factors of form, design, and material. Emphasis on experimentation with materials, techniques, and original design ideas. May be repeated once for advanced projects. PRQ: FCNS 252 or consent of school.

456. ECONOMICS OF APPAREL AND TEXTILE INDUSTRIES (3). Factors affecting the production, distribution, and consumption of apparel and textiles, and the role of the apparel and textile industries in the national economy. PRQ: ECON 260T and FCNS 258, or consent of school.

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: PSYC 102 and SOCI 170, or consent of school.

474. ADVANCED FAMILY RELATIONSHIPS (3). Theoretical approaches to family relationships; application theories to family process and the professional practice of family science. PRQ: A course in family relationships or consent of school.

484. AGING AND THE FAMILY (3). The multidisciplinary study of aging: changing family functions and the consequences with reference to workforce participation, financial status, health status of the aged and its implications for the family; housing needs; leisure in contemporary and future society; the role of public and private agencies and institutions in the provision of services for the aged. PRQ: PSYC 102 or consent of school.

489. TOPICAL ISSUES IN FAMILY AND CHILD STUDIES (3).
   A. Professional Practices in Family Social Services
   B. Social Policy, Children, and Families
   C. Child Abuse and Neglect
   D. The Family and Divorce
   E. Working with Ethnically Diverse Children and Families

490. INTERNSHIP IN INFANT AND CHILD DEVELOPMENT LABORATORIES (3-8). Supervised internship in child development. Opportunities for planning and supervising programs for infants and children up to 5 years of age. In fulfilling the 30-hour graduate program requirement, no student will be permitted to count more than 6 hours from field experience in FCNS 431 and/or FCNS 490. PRQ: FCNS 330, FCNS 331, FCNS 331A, FCNS 439, verification of a non-reactive two step tuberculin skin test within the last 6 months, and consent of school.

500. SEMINAR (1-12).
   A. Nutrition and Dietetics
   B. Family and Child Studies
   C. Marriage and Family Therapy
   D. Home Economics Education
   E. Textiles and Clothing

   Readings and reports in the designated areas of family, consumer, and nutrition sciences. May be repeated to a maximum of 12 semester hours when topic changes. PRQ: At least 6 semester hours in family and child studies or consent of school.

504. RESEARCH METHODS (3). Study of the research process including the interplay of theory, research design, data collection, and analysis. Development of a research proposal required.

515. ADVANCED CLINICAL NUTRITION (3). An in-depth study of recent trends in clinical nutrition. PRQ: FCNS 415, a course in biochemistry, and a course in human physiology, or consent of school.

516. NUTRITIONAL FACTORS IN OBESITY AND EATING DISORDERS (3). Exploration of the etiology, complications, prognosis, and treatment protocols for obesity and eating disorders. Assessment of diet and eating behavior as factors in treatment and prevention of these conditions. Students will be required to participate as staff volunteers in an ongoing weight control program. PRQ: FCNS 309 or consent of school.

520. CURRICULUM IN HOME ECONOMICS EDUCATION (3). Principles of curriculum development involving theoretical and philosophical concepts with emphasis on home economics programs including elementary, secondary, continuing education, and college. PRQ: FCNS 344 or consent of school.

521. EVALUATION IN HOME ECONOMICS EDUCATION (3). Methods of evaluation. Relationship to curriculum. Selection, construction, and use of evaluation devices for home economics programs. PRQ: FCNS 344 or consent of school.

522. TRENDS AND ISSUES IN FAMILY, CONSUMER, AND NUTRITION SCIENCES (3). Exploration of current issues in family, consumer, and nutrition sciences at the secondary, post-high-school, and college levels. Consideration of trends contributing to the issues and proposed solutions.

525. ADMINISTRATION AND SUPERVISION IN FAMILY, CONSUMER, AND NUTRITION SCIENCES (3). Theories and principles of leadership and supervision as related to family, consumer, and nutrition sciences teaching, secondary departments, and state family agencies. Objectives, techniques, and evaluation of supervision.

535. BEHAVIOR ASSESSMENT OF THE INFANT AND YOUNG CHILD (3). Content and methodology of the assessment of behavior of the infant and young child. Specific discussions and materials on the measurement of personality, maturation and readiness, intelligence, social behavior, and interests and attitudes. Application of some of these tests and measurements will be an integral part of this course. PRQ: Consent of school.

537. THE CHILD IN THE FAMILY (3). Analysis of the reciprocal influences between family and child in the context of other important socializing influences (i.e., family, school, and peer groups). Emphasis on the roles and effective, collaborative relationships between the family and child. All major domains of development are examined. Relevant information is included from historical, philosophical, anthropological, cross-cultural, and psychological perspectives. PRQ: Consent of school.

539. PRACTICUM.
   A. Parent Education (1-6). Under staff supervision, the student develops and implements a program aimed at changing parental and family attitudes and behaviors. May be repeated to a maximum of 6 semester hours that can be applied toward a master's degree. PRQ: FCNS 438 and consent of school.
   B. Family Therapy (1-9). Under faculty supervision, the student develops the professional skills of marriage and family therapists. May be repeated to a maximum of 9 semester hours that can be applied toward a master's degree. Applicable toward AAMFT clinical contact and supervision requirements. Restricted to students admitted to the Master's Degree Program. PRQ: Consent of school.
   C. Food Systems Management (5). Supervised participation in a variety of food service systems. S/U grading. PRQ: Consent of school.
   D. Nutrition Care in Dietetics (1-11). Supervised participation in nutrition care in a health care institution. May be repeated to a maximum of 11 semester hours. S/U grading. PRQ: Consent of school.
   E. Textiles, Apparel, and Merchandising (3). Supervised participation in professional settings. PRQ: Consent of school.

540. HOME ECONOMICS FOR TEACHERS OF THE VISUALLY HANDICAPPED (3). Techniques used by blind homemakers in meal preparation, shopping, house cleaning, selection and care of clothing, and child rearing, recreational and leisure time activities.

545. MACRONUTRIENTS (3). Study of the current knowledge of the metabolic basis of nutritional needs of macronutrients (carbohydrates, proteins, fats, calcium, phosphorous, magnesium, and electrolytes) including clinical implications. PRQ: FCNS 309, a course in biochemistry, and a course in physiology; or consent of school.

546. MICRONUTRIENTS (3). The basis of nutritional needs for vitamins and trace minerals including nutrient interactions. PRQ: FCNS 309, a course in biochemistry, and a course in physiology; or consent of school.

550. WORKSHOP IN FAMILY, CONSUMER, AND NUTRITION SCIENCES (1-6). Workshop designed for professional personnel to study current issues, trends, and programs in a specialized area. Emphasis varies and is announced in workshop title. May be repeated. Maximum of 6 semester hours of workshops may be applied toward master's degree. PRQ: Consent of school.

551. WORKSHOP IN DIETETIC PRACTICE: STANDARDS, STRATEGIES, AND SKILLS (1-2).
   A. Clinical Care Issues
   B. Management Issues

   An exploration and evaluation of techniques, procedures, and policies associated with the contemporary practice of dietetics. PRQ: Consent of school.
553. NUTRITION IN GROWTH AND HUMAN DEVELOPMENT (3).
A. Maternal and Child Nutrition
B. Nutrition and Physical Activity
C. Geriatric Nutrition
The interaction of the psychological and sociophysiological aspects of nutrition throughout the life cycle. Emphasis on integration of current literature. May be repeated to a maximum of 9 semester hours; however, each topic section may only be taken once. PRQ: Undergraduate course in applied nutrition or consent of school.

554. ADVANCED APPAREL DESIGN (3). Exploration of apparel design through draping and pattern drafting technique. Emphasis on the original ideas and interrelated factors of materials, design, and form. PRQ: FCNS 452 or FCNS 454, or consent of school.

562. CURRENT PROBLEMS IN CONSUMER TEXTILES (3). New development in textiles; analysis of quality control and production standards, evaluation of current problems. PRQ: FCNS 351 or consent of school.

564. FASHION PROCESS ANALYSES (3). An interdisciplinary approach to fashion process analyses incorporating anthropology, economics, history, sociology, psychology, marketing, and consumer behavior. Applications of existing fashion concepts and theories to contemporary environments. PRQ: FCNS 464 and consent of school; or FCNS 468 or consent of school.

566. READINGS IN TEXTILES, APPAREL, AND MERCHANDISING (3). An analysis of selected readings including research in textiles, apparel, and merchandising. PRQ: Consent of school.

572. HISTORIC TEXTILES (3). Methods of textile formation and textile design processes over time and in diverse cultures. PRQ: FCNS 152 or consent of school.

574. CLOTHING AND HUMAN BEHAVIOR (3). Clothing as a reflection of human behavior as related to the concepts from the behavioral sciences. Interpretation of research findings. PRQ: FCNS 464 or consent of school.

584. THE FAMILY WITH ADOLESCENTS (3). Developmental tasks of the family with adolescents; parental and adolescent roles, communication networks, adolescent identity and sexuality.

585. FAMILY STRESS AND STRUCTURAL DIVERSITY (3). An analysis of the possible problems and strengths of families that have experienced nonnormative stressors or reflect structural diversity. PRQ: FCNS 500B or consent of school.

589. READINGS IN FAMILY AND CHILD STUDIES (3). Analysis of normative, developmental, and ecological changes across the life span. Focuses on developmental transitions such as childbirth, adolescence, and aging. PRQ: Upper-division course in family or child studies or consent of school.

592. PROFESSIONAL ISSUES IN FAMILY THERAPY (3). Survey and discussion of ethical, legal, and contextual issues in the practice of marriage and family therapy. PRQ: Consent of school.

595. STRATEGIES OF FAMILY THERAPY (3). An exploration of the specific perceptual, conceptual, and intervention skills of traditional and current family therapy approaches. PRQ: FCNS 684 or consent of school.

596. STRUCTURAL FAMILY THERAPY (3). An exploration of the specific perceptual, conceptual, and intervention skills of structural family therapy, developed by Salvador Minuchin. PRQ: Consent of school.

598. PROJECT (1-6). Individual application of student's area of study to the solution of a problem, under supervision of an adviser. Not open to students who select a thesis program. May be repeated to a maximum of 6 semester hours. PRQ: FCNS 504 or consent of adviser.

599A. THESIS (1-6). Individual investigation of a problem under supervision of an adviser. May be repeated to a maximum of 6 semester hours. Continuous enrollment is required until the thesis is completed. PRQ: FCNS 504 or consent of adviser.

599B. ONE-PERSON SHOW (1-6). Preparation of the one-person show and documentation from point of view of both content and form. May be repeated to a maximum of 6 semester hours. Continuous enrollment is required until the show is completed. PRQ: Major in textiles and clothing (field of design) and consent of adviser.
Department of Military Science (MILS)

Chair: Major Jann E. Stovall

Faculty
Major Ralph Peterson, assistant professor, B.S., Northern Illinois University
Major Jann E. Stovall, professor, M.S, University of Southern California
Major Richard W. Tom, assistant professor, B.S., University of Utah

The Department of Military Science offers graduate students training and experience in the art of organizing, motivating, and leading others, while completing their studies for a degree in an academic discipline of their own choice. Completion of the program leads to a commission in the U.S. Army. The Reserve Officers' Training Corps is open to all eligible students, both male and female. The curriculum is centered around an applied leadership training program which is designed to develop those personal traits and qualities essential to successful leadership in civilian life, as well as the military environment. Those who complete the advanced program will serve as commissioned officers with National Guard, U.S. Army Reserve, or regular U.S. Army units.

Program
Army ROTC offers a two-year program which meets the needs of most graduate students. To enter this program students usually attend a six-week basic camp the summer before entering the advanced courses. Application is made in the spring or early summer. Students are paid while attending basic camp. Upon completion of the camp students may enter directly into the advanced courses and start receiving a $150-per-month stipend.

Veterans' Option
In most cases, prior military service will qualify for placement credit so that veterans may enroll directly in the advanced course. Veterans are permitted to receive G.I. Bill benefits and state benefits as well as the $150-per-month stipend while enrolled in the advanced courses.

Eligibility
Interested students should contact the department on enrollment procedures and specific eligibility requirements. Generally, to enroll in the military science program leading to an officer's commission the student must
- be a citizen of the United States or have been lawfully admitted to the U.S. for permanent residence under applicable provisions of the Immigration and Naturalization Act and be at least 17 years of age;
- be enrolled as a full-time student at NIU with at least four semesters remaining at NIU;
- be able to complete the ROTC program prior to reaching 30 years of age (Age requirements may be waived in some cases);
- be physically and mentally qualified and of good moral character; and
- be selected by the professor of military science.

Commissioning Requirements
To be eligible for commissioning as a Second Lieutenant in the U.S. Army, the graduate student must have completed all military science advanced courses and be in good standing academically. Additionally, the student must have successfully completed several interdisciplinary studies at either the undergraduate or graduate level. These include, as a minimum, one course each in written communications, human behavior, mathematical reasoning, computer literacy, and military history. Also recommended are studies in management and national security. Students should confer with the chair, Department of Military Science, to determine specific courses which fulfill this requirement.

Leadership Laboratory
A leadership laboratory is required each week for all military science students. Content varies with the student year-group and military science class.

Course List (Advanced Courses)
Credit earned in military science is not applicable toward graduate degree requirements.

301. MILITARY TRAINING AND TACTICS I (3).
302. MILITARY TRAINING AND TACTICS II (3).
325. BASIC PRACTICUM IN MILITARY SCIENCE (3).
350. ADVANCED PRACTICUM IN MILITARY SCIENCE (3).
401. MILITARY LEADERSHIP AND MANAGEMENT I (4).
402. MILITARY LEADERSHIP AND MANAGEMENT II (4).
495. INDEPENDENT STUDY (3).
School of Nursing (NURS)

Chair: Marilyn Frank-Stromborg

Graduate Faculty

Ruth Belknap, assistant professor, Ph.D., Wayne State University
Virginia Cassidy, professor, Ed.D., Northern Illinois University
Sue Elster, assistant professor, Ph.D., University of Utah
Marilyn Frank-Stromborg, professor, Presidential Research Professor, Ed.D., J.D., Northern Illinois University
Rebecca A. Johnson, assistant professor, Ph.D., University of Iowa
Jin Hee Kim, assistant professor, Ph.D., University of Illinois, Chicago
Ayhan A. Lash, associate professor, Ph.D., University of Chicago
Brigid Lusk, assistant professor, Ph.D., University of Illinois, Chicago
Diane Mertens, assistant professor, Dr.Ph., University of Illinois, Chicago
Lorys F. Oddi, professor, Presidential Teaching Professor, Ed.D., Northern Illinois University
Julie Robertson, associate professor, Ed.D., Northern Illinois University
Georgia G. Whitley, associate professor, associate chair, Ed.D., Northern Illinois University

Master of Science in Nursing

The School of Nursing offers a program of graduate study leading to an M.S. in nursing which is fully accredited by the National League for Nursing. A minimum of 4 semesters is required for completion of the program. Graduates are prepared for an advanced practice role as either a nurse practitioner or a clinical nurse specialist in a selected field of clinical study and are eligible to sit for national examinations for certification as a family nurse practitioner, an adult nurse practitioner, or an adult clinical nurse specialist.

Current licensure as a registered nurse in one of the jurisdictions of the U.S. is prerequisite to enrollment in all nursing courses unless otherwise specified. Registered nurses who hold the baccalaureate in nursing may enroll in graduate nursing courses as students-at-large. With the approval of the student's graduate adviser, a maximum of 9 semester hours of student-at-large credit may be applied to degree requirements. Exceptions to this 9-hour limit may be made only for students who are required to complete up to 15 semester hours of graduate work in order to demonstrate an acceptable GPA. (See “Admission” below.)

Enrollment in the internship courses (NURS 527, NURS 528, NURS 577, and NURS 578) requires that planning be completed with appropriate faculty during the semester preceding each internship experience. Continuous enrollment must be maintained if two 3 semester hour blocks are taken in NURS 527.

Students must have completed an introductory statistics course and an introductory research course prior to enrolling in NURS 513. An introductory health assessment course must be taken prior to enrolling in NURS 519. EPSY 521 or a graduate-level intermediate statistics course may be taken prior to or concurrently with NURS 512 and NURS 513.

To maintain enrollment in the graduate program, evidence of current registered nurse licensure, professional liability insurance, CPR certification, and absence of active tuberculosis is required.

All field of clinical study courses are permit courses. In order to receive a permit for the course a student must complete the appropriate prerequisite courses and submit documentation of compliance with clinical requirements to the School of Nursing, Room 190. Clinical requirements include evidence of current registered nurse licensure, professional liability insurance, appropriate CPR certification, and required immunizations.

The graduate faculty committee may determine that a student not continue in the master's program in nursing for failure to maintain professional standards.

Graduate students plan their program of study in consultation with an assigned adviser. With the advice and consent of the adviser, a student may elect a thesis option, which requires completion of an additional 3 semester hours. A maximum of 6 semester hours of credit may be transferred from another college or university. The adult health clinical nurse specialist course of study requires 42 semester hours. The family nurse practitioner course of study and the adult health nurse practitioner course of study require 48 semester hours.

Admission

Admission to graduate study in nursing requires compliance with the following standards of the School of Nursing.

Current licensure as a registered nurse in the U.S.
A baccalaureate degree from a National League for Nursing (NLN) accredited school (or from a program seeking initial NLN accreditation) which includes an upper-division major in nursing equivalent to the undergraduate nursing major at NIU. If the applicant is a graduate of a non-graded baccalaureate program in nursing, NLN accreditation is required. The applicant must provide documentation of course work which is essentially equivalent to that required in the nursing major at NIU.
A minimum 2.75 GPA (based on a 4.00 system) for the last 60 hours of the baccalaureate program, or completion of 15 or more semester hours of graduate work at an accredited institution with a GPA of 3.20 or better.
A composite GRE score in compliance with School of Nursing standards.
A statement of overall career goals submitted as an example of professional writing skills. The statement should be typewritten, single-spaced with a 300-word maximum limit and should include the student's desired field of study.
The approval of the School of Nursing Graduate Admissions Committee.

The applicant may be required to have a personal interview with the university and/or the School of Nursing Graduate Admissions Committee.

Admission decisions are normally made within three weeks of receipt of the complete application.

Requirements

Non-Thesis Option
EPSY 521, Educational Statistics I (3), OR another intermediate graduate statistics course approved by the School of Nursing
NURS 512, Theoretical Perspectives for Advanced Practice Nursing (3)
Nursing Program Overview

Nursing Program Overview

The post-master's family nurse practitioner course of study is comprised of 26 semester hours of study which include class lectures, simulated laboratory experiences, and 608 hours of clinical experiences with designated preceptors. The purpose of the course of study is to provide the course work and clinical experience to become family nurse practitioners upon the successful completion of the nationally administered Family Nurse Practitioner Certification Examination.

The family nurse practitioner course of study does not lead to a formal graduate degree. At completion of the course of study, students will receive a Statement of Completion. Students admitted to the family nurse practitioner courses are expected to enroll in 10 semester hours of course work in the fall and spring semesters and 5 semester hours of course work during the summer term. Students who have deficiencies in prerequisite courses may be able to take them at the same time they are taking the family nurse practitioner series of courses.

Prerequisites for admission into the course of study include a master's degree in nursing from a program accredited by the National League for Nursing, an introductory health assessment course (equivalent to NURS 306), an epidemiology course (equivalent to AHPh 555), a biological and behavioral concepts for advanced nursing practice course (equivalent to NURS 508), and an advanced community health nursing analysis and application course (equivalent to NURS 571). Courses included in master's degrees other than NIU's will be evaluated on an individual basis.

Required Courses

- NURS 600, Clinical Decision Making in Advanced Nursing Practice (3)
- NURS 601, Clinical Pharmacology and Therapeutics in Advanced Nursing Practice (4)
- NURS 602, Conceptual Basis for Family Health Nursing for the Family Nurse Practitioner (3)
- NURS 605, Advanced Health Assessment and Differential Diagnosis (4)
- NURS 610, Family Health: Promotion and Maintenance (6)
- NURS 620, Family Health: Acute and Chronic Illnesses in the Individual (6)

Course List

500. THEORIES OF NURSING (3). Exploration of the present status of theory development within the profession of nursing. Importance of scientifically based theories as a rationale for advanced nursing practice. Opportunity for analysis and evaluation of proposed theoretical frameworks for nursing.

505. NURSING RESEARCH I (3). Analysis of the research process as a basis for advanced practice and as related to theory development in nursing. Preparation for proposal development. PRQ: An introductory statistics course, an introductory research course, and consent of school. CRQ: NURS 500 and EPSY 522 and consent of school.

506. NURSING RESEARCH II (3). Application of the research process to the development of a clinical nursing study. Exploration of resources available to support research, issues in research, and future research goals for the profession. PRQ: NURS 505 and consent of school.

507. ADVANCED NURSING PRACTICE IN HEALTH CARE SYSTEMS (3). Analysis of the U.S. health care system and those of other countries. Emphasis on using selected behavioral processes in advanced nursing practice to influence health care policy and delivery.

508. BIOLOGICAL AND BEHAVIORAL CONCEPTS FOR ADVANCED NURSING PRACTICE (3). Application of selected biopsychosocial concepts to advanced nursing practice. Integration of research from nursing and related disciplines.

510. ADVANCED ADULT HEALTH NURSING: REGULATING AND METABOLIZING SYSTEMS (3). Advanced nursing care of adults with selected alterations in neurologic, endocrine, and metabolic systems. Emphasis on an integrative conceptual approach to developing a theoretical and empirical basis for advanced nursing practice to enhance health. Theory will be validated in the practice setting. PRQ: NURS 508, an introductory health assessment course, or consent of school. CRQ: NURS 506 and NURS 507, or consent of school.

511. ADVANCED ADULT HEALTH NURSING: COORDINATING AND METABOLIZING SYSTEMS (3). Advanced nursing care of adults with selected alterations in neurologic, endocrine, and metabolic systems. Emphasis on an integrative conceptual approach to developing a theoretical and empirical basis for advanced nursing practice to enhance health. Theory will be validated in the practice setting. PRQ: NURS 508, an introductory health assessment course, or consent of school. CRQ: NURS 506 and NURS 507, or consent of school.

512. THEORETICAL PERSPECTIVES FOR ADVANCED PRACTICE NURSING (3). Exploration of links between theory, research, and knowledge guiding advanced nursing practice. Evaluation of various theoretical perspectives for their applicability to practice phenomena. Consideration of the research process as a source of nursing knowledge. CRQ: EPSY 521 or consent of school.

513. SCIENTIFIC INQUIRY IN ADVANCED PRACTICE NURSING (3). Evaluation of selected research methods to identify client-focused clinical nursing problems and appropriate interventions in advanced practice. Use of databases to analyze selected client-related epidemiological problems. Analysis of selected clinical problems and methods for integration of research into advanced practice. PRQ: EPSY 521 and NURS 512, or consent of school.

514. ACTUALIZING THE ADVANCED PRACTICE NURSING ROLE (3). Economic, social, political, ethical, and legal issues impacting advanced nursing practice. Components of professionalism and their effect on clinical decision making. Selected clinical experiences supplement the course. CRQ: NURS 512 or consent of school.

515. DIVERSITY WITHIN COMMUNITY SYSTEMS FOR ADVANCED NURSING PRACTICE (3). Exploration, analysis, and application of epidemiological principles, group processes, and change theory within community health systems. Emphasis on physiological, cultural, racial, ethnic, age, and gender group variants that might influence assessment and strategic planning for meeting the health needs of populations. Selected clinical experiences supplement this course. CRQ: NURS 512 or consent of school.
516. ADVANCED PRACTICE NURSING WITHIN THE HEALTH CARE DELIVERY SYSTEM (3). Analysis of the U.S. health care system and its components using a systems approach to health care policy and finance. Concepts in organizational structure and theory and political processes as they influence health care policy and delivery. PRQ: NURS 512 or consent of school. CRQ: NURS 513 or consent of school.

517. PATHOPHYSIOLOGICAL CONCEPTS IN NURSING (4). Underlying principles common to disease processes. Physiology and pathophysiology of selected systems and subsystems illustrating altered states across the life span. Integration of current research from nursing and other disciplines. PRQ: NURS 512 or consent of school.

518. CLINICAL PHARMACOLOGY AND THERAPEUTICS IN ADVANCED NURSING PRACTICE (4). Principles of pharmacology for the primary care nurse. Exploration in the clinical setting of immunologic, respiratory, and cardiovascular systems. Emphasis on the integration of this knowledge base and skills into the advanced nursing practice role. PRQ: NURS 512 or consent of school. CRQ: NURS 519 or consent of school.

519. HEALTH ASSESSMENT (4). Didactic and simulated experience to develop advanced health assessment skills for culturally diverse clients across the life span. Emphasis on analytical thinking in clinical diagnosis and formulation of clinical problem lists and plans of care. Selected clinical experiences supplement the course. PRQ: NURS 306, NURS 518, or consent of school.

520. ADULT RESPONSES TO HEALTH AND ILLNESS I (3). Advanced nursing practice in health promotion and management of health responses to health alterations across the adult life span. Focus on epidemiology, symptomatology, interventions, and case management. Emphasis on selected alterations in cardiovascular, immune, respiratory, and genitourinary systems of individuals within the context of the family. PRQ: NURS 513, NURS 514, NURS 515, NURS 516, NURS 518, or consent of school. CRQ: NURS 519 or consent of school.

521. ADULT RESPONSES TO HEALTH AND ILLNESS II (3). Advanced nursing practice in health promotion and management of human responses to health alterations across the adult life span. Focus on epidemiology, symptomatology, interventions, and case management. Emphasis on selected alterations in endocrine, neurological, musculoskeletal, gastrointestinal, and integumentary systems of individuals within the context of the family. PRQ: NURS 513, NURS 514, NURS 515, NURS 516, NURS 518, or consent of school. CRQ: NURS 519 or consent of school.

522. ADULT NURSE INTERNSHIP I (3). Application of advanced nursing care to clients with alterations in biobehavioral systems across the adult life span within the context of the family. Individualized internship to increase competence in the chosen area of clinical study. May be repeated to a maximum of 6 semester hours; however, continuous enrollment in the internship is limited to 3 semester hour blocks are taken. PRQ: NURS 513, NURS 514, NURS 515, NURS 516, NURS 518, NURS 519, or consent of school. CRQ: NURS 525 or NURS 526, or consent of school.

523. ADULT NURSE INTERNSHIP II (6). Management of clients with alterations in biobehavioral systems across the adult life span within the context of the family. Individualized internship to develop competencies within the adult nurse practitioner role in selected settings. PRQ: NURS 527 and consent of school.

530. INDEPENDENT STUDY (1-3). Independent study under faculty supervision. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

531. PRACTICUM IN NURSING EDUCATION (1-3). Independent experience in nursing education under faculty supervision. May be repeated to a maximum of 9 semester hours. Credit not applicable toward the M.S. with a major in nursing. PRQ: Consent of school.

532. PRACTICUM IN NURSING RESEARCH (1-3). Independent experience under faculty supervision in selected components of the nursing research process. Activities may include proposal development, literature review, data collection, computer data entry, data analysis, and report writing. May be repeated to a maximum of 9 semester hours. Credit not applicable toward the M.S. with a major in nursing. PRQ: Consent of school.

533. ADVANCED HEALTH ASSESSMENT (3). Didactic, simulated, and clinical experiences to develop advanced knowledge and skills in health assessment. Emphasis on the integration of this knowledge base and skills into the advanced nursing practice role. PRQ: An introductory health assessment course or consent of school.

535. PHYSICAL ASSESSMENT TECHNIQUES FOR NURSES (3). Didactic and simulated experiences to develop basic skills in physical assessment. Acquired knowledge and skills are integrated into the nursing process. PRQ: Consent of school.

536. CLINICAL EXPERIENCE: PHYSICAL ASSESSMENT (1). A laboratory experience in the clinical setting wherein physical assessment skills are developed and evaluated. Experiences will be scheduled on Saturdays. CRQ: NURS 535. PRQ: Consent of school.

537. EMERGENCY AND TRAUMA NURSING (3). Investigation of the role of the nurse in the management of patients and families with trauma and other emergency health care needs within the community context. Exploration of the scientific basis for establishing priorities of care. Specific clinical problems are selected for study.

539. ONCOLOGY NURSING SEMINAR (3). Selected topics related to the illness trajectory for individuals experiencing alterations in cellular proliferation. Emphasis on the role of the nurse in advanced practice in enhancing adaptation of the individual and family.

545. ADVANCED PARENT-CHILD HEALTH NURSING: BASES FOR PRACTICE (3). Selected issues that affect individual and family system development, interaction, and adaptation during the child-bearing and child-rearing years. Emphasis on the advanced practice role of the nurse in enhancing the health of the family system. Theory will be validated in the practice setting. PRQ: AHPH 555 or NURS 508, an introductory health assessment course, or consent of school. CRQ: NURS 506, and NURS 507, or consent of school.

546. ADVANCED PARENT-CHILD HEALTH NURSING: HIGH-RISK MOTHER-FETAL DYSY (3). Theories and concepts related to the care of the high-risk infant/child. Emphasis on the advanced practice role of the nurse in enhancing the health of the high-risk infant and child. Theory will be validated in the practice setting. PRQ: AHPH 555 or NURS 508, an introductory health assessment course, or consent of school. CRQ: NURS 506 and NURS 507, or consent of school.

547. ADVANCED PARENT-CHILD HEALTH NURSING: HIGH-RISK MATERNAL FETAL DYAD (3). Theories and concepts related to the care of the high-risk maternal fetal dyad. Theory will be validated in the practice setting. PRQ: AHPH 555 or NURS 508, an introductory health assessment course, or consent of school. CRQ: NURS 506 and NURS 507, or consent of school.

555. ADVANCED OLDER ADULT HEALTH NURSING: AGING PROCESSES (3). Study of the aging process as it affects physiologic and psychosocial systems of older adults. Emphasis on processes used by nurses in advanced practice to enhance the health of older adults. Theory will be validated in the practice setting. PRQ: AHPH 555 or NURS 508, an introductory health assessment course, or consent of school. CRQ: NURS 506 and NURS 507, or consent of school.

556. ADVANCED OLDER ADULT HEALTH NURSING: ALTERATIONS IN MENTAL HEALTH (3). Study of older adults experiencing alterations in mental health. Emphasis on cooperative roles and responsibilities of advanced practice nurses to enhance mental health in older adults. Theory will be validated in the practice setting. PRQ: NURS 506 or NURS 507, or consent of school.

557. ADVANCED OLDER ADULT HEALTH: SOCIETAL IMPACT AND RESPONSE (3). Study of the impact of the increasing older population on family, societal, and health care systems. Emphasis on processes used by health care providers to enhance stability of these systems. Theory will be validated in the practice setting. Open to non-nursing majors. PRQ: NURS 555 or consent of school.

571. ADVANCED COMMUNITY HEALTH NURSING: ANALYSIS AND APPLICATION (3). Exploration, analysis, and application of epidemiologic studies, community health care delivery systems, and the planning, implementing, and evaluating of nursing services within these systems. Theory will be validated in the practice setting. PRQ: AHPH 555, an introductory health assessment course, or consent of school. CRQ: NURS 506 and NURS 507, or consent of school.

572. ADVANCED COMMUNITY HEALTH NURSING: HOME HEALTH CARE (3). Exploration of advanced nursing practice in home health care within a complex health care delivery system. Theory will be validated in the practice setting. PRQ: NURS 571 or consent of school.

573. ADVANCED COMMUNITY HEALTH NURSING: HEALTH PROMOTION (3). Exploration of advanced nursing practice within a health promotion paradigm. Theory will be validated in the practice setting. PRQ: NURS 571 or consent of school.
574. PRIMARY CARE I: INFANT, CHILD, AND ADOLESCENT (3). Principles underlying the longitudinal management of common health and illness issues in infants, children, and adolescents in the primary care setting. Emphasis on the impact of health and illness on the individual within the context of family. CRQ: NURS 513, NURS 514, NURS 515, NURS 516, NURS 518, NURS 519, and consent of school.

575. PRIMARY CARE II: ADULT (3). Principles underlying the longitudinal management of factors affecting health and common illnesses in adults in the primary care setting. Emphasis on the impact of health and illness on the individual within the context of family. CRQ: NURS 513, NURS 514, NURS 515, NURS 516, NURS 518, NURS 519, and consent of school.

577. FAMILY NURSE PRACTITIONER INTERNSHIP I: INFANT AND CHILD (4). Clinical internship with focus on the management of common health and illness conditions in primary care of infants, children, and adolescents. Emphasis on integration of health promotion and preventive measures in assessing and teaching of families. PRQ: NURS 513, NURS 514, NURS 515, NURS 516, NURS 518, NURS 519, and consent of school. CRQ: NURS 574 or consent of school.

578. FAMILY NURSE PRACTITIONER INTERNSHIP II: WOMEN (4). Clinical internship with focus on the management of women's health care in the primary care setting. Emphasis on health promotion, maintenance and preventive measures from puberty through the reproductive years, menopause, and postmenopausal years. PRQ: NURS 513, NURS 514, NURS 515, NURS 516, NURS 518, NURS 519, and consent of school. CRQ: NURS 574 or consent of school.

579. FAMILY NURSE PRACTITIONER INTERNSHIP III: ADULT (4). Clinical internship with focus on the management of common health and illness conditions in primary care of young adults through older adulthood. Emphasis on integration of health promotion, health maintenance, preventive measures, and health restoration in assessing, managing, and teaching adult clients and families. PRQ: NURS 513, NURS 514, NURS 515, NURS 516, NURS 518, NURS 519, and consent of school. CRQ: NURS 574 or consent of school.

580. SEMINAR IN CLINICAL NURSING (1-3). Seminar format to be utilized in the exploration of solutions to the development of nursing services in meeting current modern health needs. May be utilized to experiment with new formats for communicating relevant information in fields requiring nursing expertise. May be repeated to a maximum of 9 semester hours if topic changes.

585. SEMINAR IN ADVANCED NURSING ROLES (3). The roles of the nurse in advanced practice with a focus on the conceptual, theoretical, and scientific basis for role development. CRQ: NURS 507 or consent of school.

600. CLINICAL DECISION MAKING IN ADVANCED NURSING PRACTICE (3). Examination of current economic, social, state and federal, ethical, and legal issues in advanced nursing practice and professionalism. Focus on components of professionalism in advanced practice and how these impact clinical decision making by nurse practitioners. PRQ: NURS 306 and NURS 508, or consent of school. CRQ: NURS 508 or consent of school.

601. CLINICAL PHARMACOLOGY AND THERAPEUTICS IN ADVANCED NURSING PRACTICE (4). Principles of pharmacology applied to the primary care of individuals across all lifespan. Focus on proper prescribing and monitoring procedures for the various drug regimens used to treat common disease states. Potential consequences of multiple drug interaction. View of important adverse drug reactions, and dangers inherent in self-medication as well as overuse of commonly prescribed drugs. Selected clinical experiences supplement the course. PRQ: Consent of school. CRQ: APH 555 and NURS 600, or consent of school.
Concentration in Women's Studies

Director: Amy K. Levin

Women's studies is an interdisciplinary program which fosters research and teaching related to gender. The graduate concentration in women's studies permits study of gender and its significance through a systematic engagement with feminist theory and criticism, research methods, and scholarship and results in recognition of that study on the student's transcript. Since the Women's Studies Program is not a degree-offering unit, all graduate degrees are obtained through the student's major department, whose special requirements must be met. The concentration is available to students in good standing in any graduate program in the university. Students-at-large in good standing may also pursue the concentration. Faculty who regularly teach courses which contribute to the concentration or participate in the core courses come from a variety of departments.

A student who wishes to pursue the concentration should consult early in graduate studies with both her or his major department faculty adviser and the women's studies director. Students may earn transcript credit for the concentration by completing 12 hours in courses approved by the director of Women's Studies, including the two required interdisciplinary core courses. For the other 6 required hours, in addition to the approved electives listed below, any graduate-level special topics course or directed study focused on gender may be counted toward the graduate concentration in women's studies with the approval of the director of women's studies.

Students interested in pursuing this concentration are advised to consult with the director of women's studies as early as possible in their graduate program to determine the program of courses to be used for concentration credit.

Requirements (12)

ILAS 520, Feminist Theory (3)
ILAS 530, Research in Women's Studies (3)
Two of the following (6)
ART 685, Topics in Art History (3)
COMS 540, Seminar in Communication and Gender (3)
COMS 556, Feminist Film Theory (3)
ENGL 507, Topics in Literature (3)
EPCO 592, Special Topics in Counseling (3)
EPCO 595, Women and Career (3)
EPCO 666, Human Sexuality Counseling (3)
FCNS 500B, Seminar: Family and Child Studies (3)
HIST 413, Family, Sexuality, and Society since 1400 (3)
HIST 473, Topics in Women's History (3)
HIST 510, Reading Seminar in U.S. History (3)
ILAS 430, Special Topics in Women's Studies (3)
ILAS 434, Women, Men, and Language (3)
LEFE 590, Workshop in Education (3)
MGMT 496, Equal Opportunity and Employment (3)
PHIE 406, Human Sexuality (3)
PSYC 495, Seminar in Special Topics (3)
SOCI 454, Racial and Ethnic Minority Family Systems (3)
SOCI 457, Comparative Family Systems (3)

Faculty Associates

Elizabeth Burton, associate professor of geology, Ph.D.
Rose Marie Burwell, professor of English, Ph.D.
Virginia Cassidy, associate professor of nursing, Ed.D.
Martha Cooper, associate professor of communication, Ph.D.
Kay Forest, assistant professor of sociology, Ph.D.
Ibis Gómez-Vega, assistant professor of English, Ph.D.
Laverne Gyant, assistant professor of leadership and educational policy studies, Ed.D.
Heather Hardy, professor of English, Ph.D.
Beatrix Hoffman, assistant professor of history, Ph.D.
Lynn Kamenitsa, assistant professor of political science, Ph.D.
Marybeth Koos, assistant professor of art, M.A.
Allan Kullkoff, professor of history, Ph.D.
Judy Ledgerwood, assistant professor of anthropology, Ph.D.
Susan Linden, associate professor of foreign languages and literatures, Ph.D.
Amy K. Levin, associate professor of English, Ph.D.
Maryline Lukacher, associate professor of foreign languages and literatures, Ph.D.
Lettie McSpadden, professor of political science, Ph.D.
Carole Minor, professor of educational psychology, counseling, and special education, Ph.D.
Kristen A. Myers, assistant professor of sociology, Ph.D.
Barbara Posadas, associate professor of history, Ph.D.
Mary Sue Schriber, professor of English, Distinguished Teaching Professor, Ph.D.
Lois S. Self, associate professor of communication, Ph.D.
Deborah Smith-Shank, associate professor of art, Ph.D.
Elaine Stone-Drummond, assistant professor of foreign languages and literatures, Ph.D.
Diana L. Swanson, associate professor of English, Ph.D.
Toni Tollerud, assistant professor of educational psychology, counseling, and special education, Ph.D.
Margaret Villanueva, assistant professor of anthropology, Ph.D.
Virginia Wilcox-Gok, associate professor of economics, Ph.D.
Carol Yoken, director, psychological services
Secondary Teacher Certification

Departments in the College of Liberal Arts and Sciences administer programs leading to initial teacher certification in the following subject areas:

- Biology/general science
- Chemistry
- English
- Foreign languages
- History/social science
- Mathematics
- Physics/general science
- Speech communication

Students interested in teaching any of the above subject areas should see individual department listings in the catalog and seek departmental advisement concerning standards for admission and retention unique to each departmental certification program.

Requirements Common to All Accredited Teacher Certification Programs in the College of Liberal Arts and Sciences

All of the above teacher certification programs meet or exceed minimum requirements of the Illinois State Board of Education (ISBE); consequently, students completing the requirements for any of the programs will be recommended for certification under ISBE entitlement. Students with a baccalaureate degree from an accredited institution interested in secondary teacher certification in any of the above subject areas must:

- be admitted to the university as a postgraduate, student-at-large, or a graduate student. Admission to a degree program does not guarantee admission to the certification program in any department. (Students should seek transcript evaluation and advisement from the appropriate department certification adviser concerning departmental requirements for admission to the teacher certification program.)
- meet departmental requirements for the teaching subject-area.
- complete general education course work as mandated by ISBE.
- pass the U.S. and Illinois constitution test (HB 195).
- complete a minimum of 100 clock hours of clinical experiences approved by the department prior to student teaching.
- complete professional education courses mandated by the ISBE. Consult the adviser in the appropriate certification program (see above list) for information about courses which meet these requirements.
- complete the subject-area department teaching methods course.
- pass both the State of Illinois Basic Skills Examination and the appropriate subject matter examination administered by the Illinois Certification Testing System.
- complete the student teaching course offered by the subject-area department. Student teaching assignments and sites must be authorized by the subject-area department. See the appropriate department adviser for information about timely application and regulations governing the student teaching assignment.

Illinois law prohibits the employment by school districts of any person convicted of committing or attempting to commit (whether inside or outside the State of Illinois) any one of a number of specific offenses. At present those offenses include soliciting for a juvenile prostitute, juvenile pimping, exploitation of a child, obscenity, child pornography, harmful material, criminal sexual assault, aggravated criminal sexual abuse, offenses set forth in the Cannabis Control Act, and crimes defined in the Illinois Controlled Substances Act.

A satisfactory academic record is not the only criterion for admission to and retention in a certification program. Written evaluations of any candidate's performance which demonstrate deficiencies in organizational and communication skills or attitudes and behaviors unsuitable for working with students will result in that candidate not being recommended for certification.

ISBE General Education Requirements

The following meet the Illinois State Board of Education general education requirements for initial teacher certification. Graduates are advised that their undergraduate general education program may not have met all of these requirements. See the department certification adviser for transcript evaluation of both general education and subject-area course credits.

Communication Skills (9 semester hours)
- Oral Communication (3 semester hours): must focus on development and evaluation of effective speaking
- Written Communication (6 semester hours): must focus on development and evaluation of effective writing

Mathematics and Sciences (12 semester hours)
- Mathematics (3 semester hours): must focus on development and evaluation of understanding of the logical principles of mathematics
- Biological and Physical Sciences (9 semester hours): At least one of the courses in the 9 hour total must be a laboratory course, and course work in both biology and physical science must be included

Humanities and Arts (15 semester hours)
- American History (3 semester hours): must be a survey course
- English (3 semester hours)
- Humanities Electives (9 semester hours)

Social Science (9 semester hours)
- American Government (3 semester hours)
- Social Science Electives (6 semester hours)

Health and Physical Development (2 semester hours)
- Any health course focusing on personal, family, or community health (physical or mental) or safety, or any physical development course focusing on the maintenance of physical health and physical fitness, motor skill acquisition, and injury prevention and control. (Physical education activity courses do not meet this requirement.)

Third-world cultures/history (may not focus on U.S./Canadian, European, or Russian peoples [e.g., Afro-American history would not count]). Course may be included as credit in either item 3 or 4 above

Academic experiences which include a focus on cultural diversity within society

See the department certification adviser about any additional requirements.

Interdisciplinary Courses Offered by the College of Liberal Arts and Sciences

ILAS 430. SPECIAL TOPICS IN WOMEN'S STUDIES (3). May be repeated for credit to a maximum of 6 semester hours as topic changes.

ILAS 434. WOMEN, MEN, AND LANGUAGE (3). Examines the 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. Also considers 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.

ILAS 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, senior, or graduate standing.
ILAS 502. INTERNSHIP (3-12). The student will work as an intern in activities related to one of the majors in the college. The student will do reading and prepare a paper under the supervision of a faculty member in the College of Liberal Arts and Sciences. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department and college; graduate standing.

ILAS 520. FEMINIST THEORY (3). Concepts, methods, and development of feminist theories; systematic overview of schools of feminist theory as they are grounded in different social identities and epistemological perspectives; implications of feminist theories for scholarly research.

ILAS 530. RESEARCH IN WOMEN'S STUDIES (3). Interdisciplinary analysis of principles, methods, and bibliographic resources for the study of gender and for evaluating the relevance of scholarship in women's studies to traditional disciplines. Focuses on theoretical perspectives and methodological issues central in feminist inquiry and development of skills in integrating gender-related research and criticism in students' area of academic specialization. PRQ: ILAS 520 or consent of department.

ILAS 555. SEMINAR ON COMPARATIVE URBANIZATION (3). A multi-disciplinary seminar focusing on interdependent problems of urban and rural development with comparison between the United States and selected Third World areas. PRQ: ILAS 444 or consent of department.
The Department of Anthropology offers graduate courses and research opportunities leading to the M.A. degree. Graduate work in this field is designed to prepare students for teaching or research in anthropology, and for advanced study.

Applicants to the Graduate School desiring to pursue the graduate curriculum in anthropology are urged to consult with the departmental graduate advisers in order to insure that the requirements of the department will be met by the program of courses elected.

Master of Arts in Anthropology

Applicants for admission to this degree program are expected to have completed at least 15 undergraduate semester hours in anthropology and a course in statistics. A student lacking this background will be required to take compensatory work during his or her graduate program.

Requirements (30)

A minimum of one course taken for graduate credit from each of the four following subfields of anthropology (12)

- Archaeology
- Cultural-social anthropology (ANTH 421, ANTH 426, ANTH 427, ANTH 451, ANTH 454, ANTH 460, ANTH 463, ANTH 464, ANTH 465, ANTH 467, ANTH 525)
- Linguistic anthropology
- Physical anthropology

At least 18 additional semester hours, of which at least 12 must be in anthropology courses (18)

Independent study courses may not be substituted for required courses without the consent of the student's adviser and the department chair.

Each student in the master's degree program must demonstrate to the satisfaction of his or her faculty committee proficiency in either statistics or a foreign language useful for the student's research and must choose one of the following options.

Thesis Option

Students choosing this option must register for at least 3 semester hours of credit in ANTH 599, Master's Thesis, and satisfactorily complete the departmental qualifying examination in their primary subfield of anthropology. Approval of a written preliminary thesis proposal is required before registration in ANTH 599. Although the student may seek approval of the preliminary thesis proposal at any time, successful completion of the qualifying examination in the student's major subfield of anthropology is a prerequisite to formal registration in ANTH 599.

Non-Thesis Option

Students choosing this option must successfully complete the comprehensive examination in anthropology, covering all four subfields of anthropology, and must take an additional 6 hours for graduate credit in anthropology.

Course List

402. PEOPLES AND CULTURES OF THE PACIFIC ISLANDS (3). Ethnographic and ethnological survey and analysis of the societies and cultures of the Pacific Islands. The primary focus of attention will be on the lifeways of the indigenous peoples of the area. A secondary focus will be on the role which information about the lifeways of peoples of the Pacific Islands has played in the development of anthropological theory. PRQ: ANTH 220 or consent of department.

403. PEOPLES AND CULTURES OF AFRICA SOUTH OF THE SAHARA (3). A descriptive and analytic examination of representative African societies dealing with their culture, histories, and economic, political, and social organization, as well as religion and arts. Contemporary problems of culture change and social transformation within the context of decolonization. PRQ: ANTH 220 or consent of department.

405. PEOPLES OF MESOAMERICA (3). Cultural background of Mesoamerican ethnic groups; historical and contemporary sociocultural systems of Indian, black, and mestizo groups in rural and urban areas. Attention to the processes of acculturation, urbanization, and current cultural modifications influenced by contemporary society. PRQ: ANTH 220 or consent of department.

406. INDIANS OF NORTH AMERICA (3). A description and analysis of the cultures of native peoples of North America. Social, economic, and religious life; languages and arts of representative North American Indian groups. PRQ: ANTH 220 or consent of department.

407. PEOPLES AND CULTURES OF INSULAR SOUTHEAST ASIA (3). An 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). An introduction to the social and cultural diversity of mainland Southeast Asia—Thailand, Laos, Cambodia, and Vietnam. Emphasis on the area's geography, history, kinship and social organization, religious beliefs (especially Theravada Buddhism), ethnic diversity, and contemporary problems.

410. ARCHAEOLOGY OF AFRICA (3). A detailed, analytical survey of African prehistory from the earliest evidence of human occupation to the time of extra-African contact. PRQ: ANTH 210 or consent of department.

411. ARCHAEOLOGY OF EUROPE (3). The origins and development of prehistoric cultures in Europe from the Palaeolithic to the Neolithic. PRQ: ANTH 210 or consent of department.

412. ARCHAEOLOGY OF NORTH AMERICA (3). A detailed analysis of culture sequences in various archaeological areas of North America. Interrelationships between areas will be stressed. PRQ: ANTH 210 or consent of department.

413. ILLINOIS ARCHAEOLOGY (3). Examines the current state of knowledge of Illinois archaeology. Recent archaeological discoveries in our state provide a much improved picture of prehistoric life here. The 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). A descriptive and analytical examination of pre-Columbian cultures of Mexico and Central America. PRQ: ANTH 210 or consent of department.

415. ARCHAEOLOGY OF THE AMERICAN SOUTHWEST (3). The origins and diversification of prehistoric cultures in the Southwest. PRQ: ANTH 210 or consent of department.

417. ARCHAEOLOGY OF SOUTH AMERICA (3). The description and analysis of human occupation of the South American continent from its initial colonization by the indigenous peoples through the arrival of the Spanish conquistadores. Interrelationships between areas; models purporting to explain sociopolitical evolution will be emphasized. PRQ: ANTH 210 or consent of department.

420. SOCIAL ORGANIZATION (3). Description of social systems, an exploration of the regularities and variations in the several facets of social structure emphasizing the interrelatedness of the parts of culture as a functioning entity. PRQ: ANTH 120 or ANTH 220, or consent of department.

426. POLITICAL ANTHROPOLOGY (3). Political activities and how they articulate with other institutions. Presentation of various interpretations and theories that have been applied to the data. PRQ: ANTH 220 or consent of department.

427. ECONOMIC ANTHROPOLOGY (3). Analysis of economic behavior and institutions and how they articulate with other aspects of culture. PRQ: ANTH 220 or consent of department.

428. RITUAL AND MYTH (3). An 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, relationship between myth and ritual. Ritual and myth also considered in relation to ideas about the maintenance of cosmological and socio-political systems.

431. SYNCHRONIC LINGUISTICS (3). Study and application of such linguistic techniques as analysis of phonetics, phonemics, morphemics, and transformational grammar to the anthropological study of languages spoken today. PRQ: ANTH 230 or ENGL 318, or consent of department.

432. HISTORICAL AND COMPARATIVE LINGUISTICS (3). The processes of linguistic change, the method of historical reconstruction, and the establishment of time depth in groups of related languages. Language variability as a source of linguistic change, and cross-language universals as constraints on linguistic change. PRQ: ANTH 230 or ENGL 318, or consent of department.

441. FOSSIL HUMANS (4). An analytical survey of the evolutionary development of humans, from earliest hominid forms to the emergence of modern people. Focus is on interpretation of morphology, theory in paleontology, and the relationship between human biological and cultural evolution. Lectures and laboratory. PRQ: ANTH 240 or consent of department.

454. COMPARATIVE ANTHROPOLOGY (3). The testing of anthropological theories through cross-cultural comparison. Analysis of the methodology and substantive results of cross-cultural surveys, controlled regional comparisons, and intensive comparison using a small number of cases. PRQ: ANTH 220 or consent of department.

462. MUSEUM METHODS (3). Lectures and practical experience in various aspects of museum work; design and construction of museum exhibits in anthropology. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

463. ETHNOHISTORY (3). Approaches to locating, evaluating, and utilizing oral and written historical sources in ethnographic and anthropological investigations. PRQ: ANTH 220 or consent of department.

464. URBAN ANTHROPOLOGY (3). Anthropological perspective on the comparative study of ancient and modern cities and their hinterlands. Cross-cultural analysis, with particular attention to the identification of constants and variables in urban cultures. PRQ: ANTH 220 or consent of department.

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 200 or ANTH 240, or consent of department.
467. APPLIED ANTHROPOLOGY (3). The uses of anthropological concepts, knowledge, and insights to maintain or change cultures and societies combined with a consideration of the ethical problems in programs of directed culture change. PRQ: ANTH 220 or consent of department.

468. ANTHROPOLOGY OF GENDER (3). Survey of current theory and research on gender, sexuality, and representations of the body. Examination of debates about the significance of gender and sex in primate and human evolution, physical anthropology, and sociobiology. In seminar format, students also explore cross-cultural notions of gender and analyze the intersection of race/class/gender and the historical construction of sexuality and conceptions about the "body" in the sciences, the arts, ethnography, and popular culture. PRQ: ANTH 220 or consent of department.

490. ANTHROPOLOGICAL RESEARCH TRAINING (3-6).
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 will 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). Selected topics of current interest in anthropology. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

492. PROSEMINAR IN ANTHROPOLOGY (3). Intensive seminar work on selected topics in anthropology. May be repeated to a maximum of 5 semester hours. PRQ: Consent of department.

493. ANTHROPOLOGY FIELD STUDY (1-6). Directed field study in archaeology, social and cultural anthropology, linguistic anthropology, physical anthropology, or museology. The length of the field trip and the semester hours earned will depend on the area visited and the specific topic for field research. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

496X. MATERIALS AND PROBLEMS OF HIGH SCHOOL INSTRUCTION IN THE SOCIAL SCIENCES (3). HIST 496. Must be taken before student teaching. Includes 15 clock hours of clinical experience, attention to the teaching of exceptional students, planning for multicultural learning situations, and techniques of reading in the social sciences. PRQ: Consent of department.

510. ARCHAEOLOGY AND PREHISTORY (3). A critical analysis of original works of major importance in the development and current state of archaeological methods and prehistory. PRQ: Consent of department.

511. ARCHAEOLOGICAL INTERPRETATIONS (3). Detailed examination of theories and methods basic to cultural, temporal, and environmental interpretation of archaeological data. Relationships with other anthropological subdisciplines and with other sciences will be stressed. PRQ: ANTH 411, ANTH 412, or ANTH 414, or consent of department.

520. CULTURAL AND SOCIAL ANTHROPOLOGY (3). A critical analysis of original works of major importance in the development and current state of cultural and social anthropology. PRQ: Consent of department.

521. ADVANCED TOPICS IN SOUTHEAST ASIAN ETHNOLOGY (3). Intensive seminar on a selected topic of current interest regarding the ethnology of Southeast Asia. May be repeated to a maximum of 6 semester hours. PRQ: ANTH 407 or ANTH 408 or, consent of department.

525. SYMBOLIC ANTHROPOLOGY (3). Anthropological approaches to the role of symbols in culture.

526. LATIN AMERICAN PEASANTS AND SOCIAL CHANGE (3). Anthropological perspectives on rural economic structure and social change in Latin America, with emphasis on geographical regions from central Mexico to the Andes that have high proportions of indigenous peoples. Methodological emphasis on comparative historical analyses of agricultural systems, ethnic identity, peasant social movements, and the relationship between economy and culture. PRQ: Consent of department.

527. SOUTHEAST ASIAN PEASANT ECONOMY (3). Anthropological perspectives on the nature of Southeast Asian peasant socio-economic institutions. Comparative analysis of how political and economic policies have affected processes of change in both lowland and highland peasant cultures over time. PRQ: Consent of department.

528. RELIGION AND COSMOLOGY IN SOUTHEAST ASIA (3). Perspectives of cultural anthropology on the folk religions and world views of peoples of Southeast Asia. Comparative analysis of the impact of different religious and secular ideologies on everyday political and economic thought and behavior of common people in various urban and rural settings of the past and present. PRQ: Consent of department.

533. COGNITIVE ANTHROPOLOGY (3). The study of cognition through the formal semantic analysis of kinship systems, folk taxonomies, and other terminological networks with emphasis on how such analyses relate to nonlinguistic aspects of the cultures in which they are embedded. PRQ: ANTH 331 or consent of department.

540. PHYSICAL ANTHROPOLOGY (3). A critical analysis of original works of major importance in the development and current state of physical anthropology. PRQ: Consent of department.

553. CULTURE THEORY (3). Detailed examination of theories basic to studies of individual cultures and to cross-cultural comparison; structuralism, functionalism, cultural ecology, cultural evolution, network analysis, and other viewpoints. PRQ: ANTH 451 or consent of department.

590. INDEPENDENT STUDY IN ANTHROPOLOGY (1-3).
A. Cultural Anthropology
B. Ethnology
C. Archaeology
D. Physical Anthropology
E. Ethnohistory
J. Linguistics
Supervised readings or research in specialized areas, topics, or problems in anthropology. Any one course may be repeated to a maximum of 6 semester hours. PRQ: Written permission of the department.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours.

690. SEMINAR IN ANTHROPOLOGY (3).
A. Cultural Anthropology
B. Ethnology
C. Archaeology
D. Physical Anthropology
E. Ethnohistory
J. Linguistics
Intensive study of a specific area, topic, or problem of the indicated subdiscipline. Any one course may be repeated to a maximum of 9 semester hours. PRQ: Consent of department.
Department of Biological Sciences (BIOS)

Chair: Patricia S. Vary

Graduate Faculty

Mitchell Altschuler, associate professor, Ph.D., State University of New York, Albany
Richard J. Becker, assistant chair for business and operations, Ph.D., Northern Illinois University
Neil W. Blackstone, assistant professor, Ph.D., Yale University
W. Elwood Briles, adjunct professor, Ph.D., University of Wisconsin
Jozef J. Bujarski, professor, Presidential Research Professor, Ph.D., Adam Mickiewicz University (Poznan, Poland)
Sofia B. Conway, professor, Ph.D., University of California, Berkeley
Thomas P. Conway, associate professor, Ph.D., University of Illinois
Christopher Reilly, adjunct associate professor, Ph.D., University of Virginia
Virginia L. Naples, associate professor, Ph.D., Washington State University
Christopher J. Hubbard, associate professor, Ph.D., Wake Forest University
Michael E.S. Hudspeth, professor, Ph.D., Wayne State University
Peter E. Jablonski, assistant professor, Ph.D., Virginia Polytechnic Institute and State University
Mitchell A. Johns, associate professor, Ph.D., University of Oregon
Barbara P. Johnson-Wint, associate professor, Ph.D., Michigan State University
Bethia H. King, associate professor, Ph.D., Purdue University
Richard B. King, assistant professor, Ph.D., Purdue University
David P. Lotshaw, assistant professor, Ph.D., State University of New York, Albany
Rangaswamy Meganathan, professor, Ph.D., Oklahoma State University
Peter Meserve, professor, Ph.D., University of California, Irvine
John L. A. Mitchell, professor, Distinguished Research Professor, Ph.D., Princeton University
Virginia L. Naples, associate professor, Ph.D., University of Massachusetts
Lowell K. Nicolas, associate professor, Ph.D., North Dakota State University
J. Michael Parrish, associate professor, Ph.D., University of Chicago
Neil O. Polans, associate professor, Ph.D., University of California, Irvine
Peter E. Jablonski, assistant professor, Ph.D., Virginia Polytechnic Institute and State University
Christopher Reilly, adjunct associate professor, Ph.D., University of Arizona
Bernard Salafsky, adjunct professor, Ph.D., University of Washington
Ole A. Schjøde, adjunct professor, Ph.D., University of California Thomas L. Sims, associate professor, Ph.D., University of Oregon
Paul D. Sorensen, professor, Ph.D., University of Iowa
Joel P. Stafstrom, associate professor, Ph.D., University of Colorado
Marvin J. Starzyk, adjunct professor, Ph.D., University of Wisconsin
Ronald Toth, professor, Ph.D., University of Massachusetts

The Department of Biological Sciences offers graduate programs leading to the M.S. and Ph.D. degrees. Prior to being considered for admission an applicant must submit GRE scores from the General Test and the Subject Test in biology or biochemistry to the Graduate School.

Master of Science in Biological Sciences

The minimum requirement for admission to the master of science degree program is a baccalaureate degree with a major in an area of biological sciences or in a closely related field such as biochemistry or biophysics. The baccalaureate degree should have courses equivalent to those required for the B.S. degree at NIU, including organismal diversity; two semesters of principles of biology and genetics; chemistry through one year of organic; one year of physics; and mathematics through introductory calculus. Such courses not completed before admission to the Graduate School, as well as other undergraduate courses deemed appropriate to the pursuit of the master's degree in a particular specialty in biological sciences, may be required and must be taken early in the student's program.

Although one academic year is the minimum time for work leading to the M.S. degree, most students find that an additional year is necessary. If the student has deficiencies, the total number of semester hours required may exceed 30.

Requirements

BIOS 470X, General Biological Chemistry (3), or BIOS 472X and BIOS 473X, Biological Chemistry (3), (6)
BIOS 570, Biostatistical Analysis (3)
BIOS 681, Seminar (minimum of 2 semester hours of credit)

A minimum of 30 semester hours is required for the M.S. degree. Additional hours may be required based on the student's total score and subscores on the Subject Test of the GRE. If a student has completed the equivalent of BIOS 470X (or BIOS 472X and BIOS 473X) and/or BIOS 570 as an undergraduate with a grade of B or better, the course may be waived as a requirement in the graduate program, and other course work substituted, with the approval of the departmental coordinator of graduate studies. The student is required to pass a final oral comprehensive examination.

Each student will declare, with the consent of the departmental graduate committee, one of the following two options.

Thesis Option

The thesis option is intended primarily for students wishing to focus on certain areas of biology and for those considering further graduate education. Each student must enroll in BIOS 599, Master's Thesis, and submit a written thesis. A maximum of 12
semester hours of combined credit in BIOS 599 and BIOS 670
may be applied toward the degree. The student’s research adviser
will serve as chair of the graduate committee that will administer
a final oral comprehensive examination including a defense of
thesis.

Non-Thesis Option
The non-thesis option is intended primarily for students wishing
to become generalists by taking course work in several areas
within the biological sciences. This option may be appropriate for
students who desire to qualify for careers that require such breadth
in biology, for example, teaching in a secondary school or
community college, administration, or interpretive work in parks
and nature centers.

The student’s program will be designed with the advice and
approval of the departmental graduate coordinator, with a
minimum of 3 semester hours to be earned in each of six of the
following seven areas of study. A course may satisfy a requirement
in only one area of study.

- Animal biology
- Cellular and molecular biology
- Ecology and systematics
- Genetics and developmental biology
- Microbiology
- Physiology
- Plant biology

In addition, the student must take a total of 4 semester hours of
BIOS 670, Independent Study, under the guidance of a faculty
member, and submit an acceptable research paper on a topic
approved by the student’s final examination committee. This
committee shall include the faculty member directing the student’s
work in BIOS 670. The enrollment in BIOS 670 must begin within
the first 15 semester hours that are to be part of the student’s
program of courses for the degree, and must span at least two
terms.

Courses taken for an undergraduate degree may be used to satisfy
the non-thesis option distribution requirements, with the consent
of the department, providing that a grade of B or better was earned.
Such courses, however, cannot be credited toward the master’s
degree.

Specialization in Human Anatomical Sciences
This specialization is intended to equip the graduate to teach
human anatomy and human physiology at the community college
level. The course work is designed to provide students with a
solid background in the human anatomical sciences, including
skills in the dissection of human cadavers.

Students pursuing this specialization must have previously taken,
or must take as deficiency course work, BIOS 355, Human
Physiology (4), and BIOS 359, Human Neurobiology (4).

Requirements
- BIOS 445, Human Histology (3)
- BIOS 446, Gross Human Anatomy (6)
- BIOS 470X, General Biological Chemistry (3)
- BIOS 570, Biostatistical Analysis (3)
- BIOS 600A, Special Topics in Biology (6)
- BIOS 661, Seminar (minimum of 2 semester hours of credit)
- BIOS 670, Independent Study (4)

One of the following (3-4)

- BIOS 440, Immunology (3)
- BIOS 447, Comparative Vertebrate Anatomy (4)
- BIOS 454, Developmental Biology (4)
- BIOS 455, Comparative Physiology (3)
- BIOS 461, Endocrinology (3)
- BIOS 467, Molecular Biology of Eukaryotes (3)
- BIOS 477, Human Genetics (3)
- BIOS 465, Cell Physiology (3)

Students must take a minimum of 4 semester hours of BIOS 670,
Independent Study, under the guidance of an anatomy faculty
member in the Department of Biological Sciences, and submit for
that course an acceptable research project on a topic approved
by the student’s graduate committee. This committee must be
formed within the student’s first 9 semester hours of enrollment
in the M.S. program and must be chaired by the anatomy faculty
member directing the student’s work in BIOS 670.

Students must pass a final oral comprehensive examination
covering course material and the research project. Normally,
students pursuing full-time graduate study will be required to take
the comprehensive examination within two academic years of
admission to the Graduate School. A student who fails the
examination may, with the permission of the department, repeat
it once.

Doctor of Philosophy
in Biological Sciences

A student seeking admission to the Ph.D. program in biological
sciences must meet all the requirements for admission to the
Graduate School; must have a baccalaureate or master’s degree
in the biological sciences or a related field; and should have
courses equivalent to those required for the B.S. degree at
Northern Illinois University, including organismal diversity, two
semesters of principles of biology, and genetics; chemistry through
one year of organic, one year of physics, and mathematics through
introductory calculus. Such courses not completed before
admission to the program, as well as other undergraduate courses
depended appropriate to the pursuit of the Ph.D. degree in a
particular area of biological sciences, may be required and must
be taken early in the student’s program.

During the admissions process, the student must indicate an area
of study in the department and obtain a faculty adviser in that
area who will agree to plan the student’s first year of study.

Requirements
Each student’s program must consist of at least 90 semester hours
of graduate credit, including successful completion of the following
courses.

- BIOS 470X, General Biological Chemistry (3),
  OR BIOS 472X and BIOS 473X, Biological Chemistry I and
  II (6)
- BIOS 570, Biostatistical Analysis (3)
- BIOS 661, Seminar (4) (to be taken for a minimum of 4
  hours of credit, at least 2 of which shall be taken after the first 30
  graduate-level semester hours in the student’s program)
- BIOS 699, Doctoral Dissertation (enrollment each semester
  after being admitted to candidacy, until all requirements for
  the degree are complete)

If a student has completed the equivalent of BIOS 470X (or BIOS
472X and BIOS 473X) and/or BIOS 570 as an undergraduate
with a grade of B or better, the course may be waived as a
requirement in the graduate program, and other course work
substituted, with the approval of the department coordinator of
graduate studies.

By the end of the student’s second semester, the chair of his or
her doctoral committee will be selected with the approval of
the department chair. The department chair, in consultation with
the chair of the doctoral committee and the student, will nominate
a doctoral committee to be appointed by the dean of the Graduate
School. This committee will consist of no fewer than five mem-
bers, including at least one person from outside the student’s
research field. Adjunct graduate faculty may serve on the doc-
toral committee; a majority of the committee, however, must be
regular members of the graduate faculty in the Department of
Biological Sciences. Replacements which may be required on
the committee will be nominated by the remaining committee
members and the department chair from among qualified faculty
in consultation with the student.
The doctoral committee will consult with the student in the formulation of a program of courses and research study for the duration of the Ph.D. program. The committee will meet with the student at least once a year to evaluate progress toward completion of the degree requirements. This evaluation may include written and oral presentations required of the student by the committee. This committee assessment of the student's progress will appraise the student's background knowledge and his or her competence in carrying out original independent research and will determine whether the student will be retained in the Ph.D. program.

The student must demonstrate average reading proficiency in one foreign language, either by (1) completing the second semester of the intermediate level university course in a foreign language with a grade of A or B, or (2) demonstrating average reading proficiency in a foreign language by achieving a score of at least 540 in French, 570 in German, 460 in Russian, or 500 in Spanish on the Graduate School Foreign Language Test, or (3) successfully completing a translation examination arranged through the university's Office of Testing Services. The student's doctoral committee will have the responsibility of determining the appropriate foreign language for each student's program and may waive the foreign language requirement entirely for a student in whose major field the relevant literature is overwhelmingly in English.

The student must pass a candidacy examination consisting of written and oral portions and administered by the doctoral committee. This examination will include a comprehensive coverage of the student's academic background to enable the committee to evaluate the student's potential for successful completion of the Ph.D. degree program. This examination will be taken at a time designated by the doctoral committee, but no sooner than the completion of the first 27 graduate-level semester hours and no later than the completion of the first 60 graduate credit hours, to be applied to the Ph.D. program. A student who fails this examination may, with the permission of the committee, repeat it once; the repeated examination will be at a time designated by the committee, but no sooner than the lapse of one semester and no later than eight months before granting of the degree.

After the student has completed all other requirements for the degree, including the writing of a dissertation on a research topic approved by the student's doctoral committee, an oral defense of the dissertation will be conducted by the doctoral committee.

The doctoral candidate will present a public lecture, based on his or her dissertation.

Following approval of the dissertation by the doctoral committee, acceptable copies must be submitted to the Graduate School.

Course List

405. AMERICAN ECOSYSTEMS (1-9). A 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. BIOLOGICAL CONSERVATION (3). Ecological bases for conservation of biological resources and relationship of conservation practices to human welfare. Field trips required. PRQ: BIOS 205 or consent of department.

409. CYTOGENETICS (3). Lecture and laboratory exercises using plant and animal material. Topics covered include chromosome structure and function, movement of chromosomes during mitosis and meiosis, chromosome mapping, and topics in somatic cell genetics, including chromosome isolation, cell fusion, DNA and chromosome transfection, and restriction fragment length polymorphism. Two hours of lecture and three hours of laboratory per week. PRQ: BIOS 300 or BIOS 308, or consent of department.

410. PLANT ANATOMY (4). Structure of vascular plants, primarily flowering plants. Three hours of lecture and three hours of laboratory. Laboratory includes formal assignments and independent projects. PRQ: BIOS 306 or consent of department.

411. PLANT PHYSIOLOGY (4). Physical and chemical aspects of the functions of higher plants. Two hours of lecture and four hours of laboratory. PRQ: BIOS 205 and BIOS 209, or consent of department.

412. MYCOLOGY (4). Culture, morphology, and economic significance of the fungi. PRQ: BIOS 205 and BIOS 209, or consent of department.

413. MICROBIAL PHYSIOLOGY (3). Physical and chemical aspects of the functions of bacteria and other microorganisms. PRQ: BIOS 300 and BIOS 313, or consent of department.

414. FRESH-WATER ALGAE (3). Identification, economic importance, and limnological relations of the algae. PRQ: BIOS 205 and BIOS 209, or consent of department.

415. WATER MICROBIOLOGY (3). Designed to acquaint the student with normal and polluted microorganisms found in water, their sources and control. Standard methods of detection and enumeration as well as new experimental approaches will be stressed in the laboratory. PRQ: BIOS 313 and CHEM 330 or CHEM 336, or consent of department.

416. METHODS OF ECOLOGICAL STUDY (3). Methods for the study of ecosystems, communities, and populations. CRQ: BIOS 316 or consent of department.

417. PATHOGENIC MICROBIOLOGY (4). A consideration of human viruses, bacteria, and fungi and their host-para site relations. PRQ: BIOS 313 or consent of department.

418. HUMAN HEREDITY (3). Inheritance in humans. Does not count for credit toward the major in biological sciences. PRQ: BIOS 103, BIOS 104, or BIOS 109, or consent of department.

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 209 or consent of department.

422X. EDAPHOLOGY (4). GEOG 422. Chemical and physical properties of soils affecting agricultural and forest productivity, segregation of natural plant communities, and ornamental plants. Field trips are required. PRQ: BIOS 103 or BIOS 104 and GEOG 302, or consent of department.

423. GENERAL VIROLOGY (3). Interactions between bacterial, animal, and plant viruses and their hosts, with emphasis on the biochemical development and genetics of viruses. PRQ: BIOS 300 and BIOS 313, or consent of department.

430. PLANT TAXONOMY (4). Identification and classification of higher plants with emphasis on the local flora. PRQ: BIOS 205 or consent of department.

432. MACROEVOLUTION (3). Mechanisms, rates, and patterns in the origin of species and higher taxa. PRQ: BIOS 317 or consent of department.

433. BEHAVIORAL ECOLOGY (3). Examples and theories of how behavior influences survival and reproduction in different environments. PRQ: BIOS 209 or consent of department.

434. POPULATION BIOLOGY (3). Principles of population structure, dynamics, ecology, and evolution. PRQ: BIOS 316 or BIOS 317, or consent of department.

435X. PRIMATE ANATOMY AND EVOLUTION (3). ANTH 445. Living and fossil primate osteology. A detailed study of the primate skeleton is coupled with information on the primate fossil record. Skeletal anatomy of living and fossil primates is analyzed in terms of function and adaptation and is used to discern evolutionary relationships. Lectures and laboratory. PRQ: ANTH 240 or consent of department.

440. IMMUNOLOGY (3). The biochemistry and interactions of antigens, antibodies, and lymphocytes; development of the immune system; and medical applications and current immunological techniques. PRQ: BIOS 300 or BIOS 313, or consent of department.

441. EXPERIMENTAL IMMUNOLOGY (3). A laboratory course in theoretical and experimental knowledge of basic immunological techniques. CRQ: BIOS 440 or consent of department.
443X. PRINCIPLES OF PHYSICAL CHEMISTRY (4). CHEM 442. A one-
semester course intended for chemistry majors pursuing Emphases 2,
3, or 4. Also suitable for non-majors desiring a course in physical chemistry.
Topics covered are thermodynamics, chemical kinetics, and atomic and
molecular structure. Not offered for graduate credit for chemistry majors.
Four lectures a week. PRQ: CHEM 211, PHYS 251, and MATH 230, or
consent of department.

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 three-hour laboratories per week. PRQ: BIOS 300 or
consent of department.

445. HUMAN HISTOLOGY (3). The microscopic anatomy of human cells
and tissues. Emphasis on correlating cell structure at the light and ultra-
microscopic level with physiology in individual tissue and organs of the
human body. PRQ: BIOS 209 or consent of department.

446. GROSS HUMAN ANATOMY (6). Gross anatomy of the human body,
including dissection, with functional, histological, developmental, and
clinical correlates. PRQ: BIOS 356 or BIOS 357, or consent of department.

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 205 and BIOS 209, or consent of department.

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 205, BIOS 209,
and BIOS 316, or consent of department.

450. ANIMAL PARASITOLOGY (4). Systematics of parasitic protozoa,
helmiths, and arthropods with emphasis on the morphology, life cycles,
and diagnostic features of human parasites. Two hours of lecture and
four hours of laboratory. PRQ: BIOS 205 and BIOS 209, or consent of
department.

453. ENTOMOLOGY (3). Insect anatomy and taxonomy, including general
ecology and economic importance. Other arthropod groups are broadly
considered in relation to insects. PRQ: BIOS 205 and BIOS 209, or
consent of department.

454. DEVELOPMENTAL BIOLOGY (4). Mechanisms of eukaryotic
development. Emphasis on model animal systems. Two hours of lecture
and four hours of laboratory per week. PRQ: BIOS 300 or consent of
department.

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 205 and BIOS 209,
or consent of department.

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 205 and BIOS 209, or consent of
department.

457. BIOLOGY OF BIRDS AND MAMMALS (4). Evolution, taxonomy,
physiology, behavior, ecology, and distribution of birds and mammals.
Laboratory work and field trips emphasize identification of Illinois forms.
PRQ: BIOS 205 and BIOS 209, or consent of department.

459. ANIMAL BEHAVIOR (4). Determination of the function, biological
significance, causation, and evolution of species' typical behavior. Six
hours of lecture and scheduled laboratory periods. PRQ: BIOS 205 and
BIOS 209, or consent of department.

461. ENDOCRINOLOGY (3). Classic mammalian endocrine systems
examined with emphasis on cellular and molecular mechanisms of action.
Topics include endocrine cell signaling, molecular mechanisms of hormone
action, and some discussion of endocrine pathology. Lecture material
and readings from the current professional literature. PRQ: BIOS 355 or
consent of department.

462. BIOGEOGRAPHY (3). Role of ecological, evolutionary, and historical
factors in explaining the past and current distributions of plants and
animals. Conceptual theory and applications to species preservation and
nature reserve design. Three hours of lecture. PRQ: BIOS 316 or consent of
department.

463. INVERTEBRATE ZOOLOGY (4). Structure, behavior, and
classification of major invertebrate types. PRQ: BIOS 205 and BIOS 209,
or consent of department.

464. CELL SIGNALING (3). Principles of chemical communication
between cells. Detailed examination of chemical messengers, receptors,
and molecular signaling mechanisms involved in regulation of cell function,
growth, and development. PRQ: BIOS 300 or consent of department.

465. CELLULAR PHYSIOLOGY (3). Principles underlying cellular activity.
Topics include the biochemistry of cells, cell organelles, cell environment,
membranes, and energy conversions. PRQ: BIOS 300 or consent of
department.

467. MOLECULAR BIOLOGY OF EUKARYOTES (3). Mechanisms of
gene expression and regulation of gene activity in eukaryotic organisms.
PRQ: BIOS 300 or CRQ: BIOS 473X, or consent of department.

469X. INVERTEBRATE PALEONTOLOGY (3). GEOL 470. The 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. PRQ: Major in biological sciences or geology.

470X. GENERAL BIOLOGICAL CHEMISTRY (3). CHEM 470. Overall
view of biochemistry including structure, properties, function, and
metabolism of biologically important compounds. PRQ: CHEM 301 or
CHEM 337, or consent of department.

471X. BIOLOGICAL CHEMISTRY LABORATORY (3). 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. PRQ: CHEM 301 or CHEM 302, or consent of department.
CRQ: CHEM 470 or CHEM 472, or consent of department.

472X. BIOLOGICAL CHEMISTRY I (3). 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 301 or CHEM 337,
or consent of department.

473X. BIOLOGICAL CHEMISTRY II (3). 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.

474X. ADVANCED BIOCHEMICAL TECHNIQUES (3). CHEM 474. Theory
and practice in the use of techniques for the isolation and characterization
of macromolecules such as ultrafiltration, amino acid analysis,
ultracentrifugation, optical rotatory dispersion, circular dichroism,
and nmr spectroscopy, calorimetry, and rapid reaction kinetics. Two 4-
hour laboratory periods including one hour of lecture a week. PRQ:
Consent of department.

477. HUMAN GENETICS (3). Genetic diseases of man with emphasis on the
probability of birth defects. PRQ: BIOS 308 or consent of
department.

511. PLANT METABOLISM (3). Biochemical and physiological aspects
of metabolism in plants, including interpretation of current scientific
literature. PRQ: Two years of chemistry or consent of department.

518. SOIL MICROBIOLOGY (3). The major groups of soil microorgan-
isms; their significance and reactions. PRQ: BIOS 313 and one semes-
ter of chemistry, or consent of department.

525. ELECTRON MICROSCOPY (4). Preparative techniques for electron
microscopy of biological specimens. Basic theory and operation of electron
microscopes, including electron-micrography. Interpretation of the
ultrastructure of cells and cell constituents. PRQ: Consent of
department.

527X. NEUROANATOMICAL BASES OF BEHAVIOR (3). PSYC 527.
Gross, microscopic, and ultramicroscopic anatomy of the nervous system;
behavioral and histological techniques; enzyme kinetics, electron transport in mitochondria and
microsomes. PRQ: PSYC 527 or PSYC 529, or consent of department.

528X. NEUROANATOMICAL BASES OF BEHAVIOR: LABORATORY (3).
PSYC 529. Gross, microscopic, and ultramicroscopic examination of
tissues from the nervous systems of selected species. PRQ or CRQ:
BIOS 527X.

530. RADIATION BIOLOGY (3). The effects of radiation upon cells and
organisms.
530. NEUROCHEMICAL BASES OF BEHAVIOR (3). PSYC 530. Biochemistry of the nervous system; chemical composition, metabolism, and chemistry of neurons and glia; chemical bases of learning, motivation, and other categories of behavior. PRQ: Graduate standing, PSYC 529, or consent of department.

535. MOLECULAR GENETICS OF PROKARYOTES (4). Mechanisms of molecular, bacterial, and viral genetics including genetic recombination, mutagenesis, and gene regulation and expression in the bacteria and their viruses. Topics from recent literature will be emphasized as well as laboratory techniques in genetic exchange, mutagenesis, and genetic engineering. Familiarity with molecular biology concepts is assumed. PRQ: BIOS 300, BIOS 308, and BIOS 313, or consent of department.

536. EXPERIMENTS IN MOLECULAR GENETICS OF PROKARYOTES (3). Experiments with current techniques of molecular genetics of prokaryotes. CRQ: BIOS 535 or consent of department.

540. ADVANCED IMMUNOLOGY (3). The genetics of the immune response, inheritance, and structure of membrane antigens, function of B and T lymphocytes, mechanism of cell mediated immunity, and genetics of immunoglobulin molecules. PRQ: BIOS 308 and BIOS 440, or consent of department.

559. NEUROPHYSIOLOGY (3). Comparative study of the function of the peripheral and central nervous systems with an emphasis on mammals. PRQ: BIOS 355, BIOS 357, BIOS 465, or BIOS 455; or consent of department.

564. EVOLUTIONARY GENETICS (3). Population-genetic and quantitative-genetic models of evolution. PRQ: MATH 211 or MATH 229, BIOS 308 and BIOS 317 or BIOS 434, or consent of department.

570. BIOSTATISTICAL ANALYSIS (3). Principles and procedures of statistical analysis of biological data. Includes use of statistical packages and computers in the laboratory.

575. POPULATION ECOLOGY (3). The structure and dynamics of animal populations and communities. PRQ: BIOS 316 and MATH 229, or consent of department.

580. COMMUNITY ECOLOGY (3). Concepts of classification, organization, structure, and change in biotic communities over ecological and evolutionary time. The role of physical factors and biotic interactions as well as hypotheses of community equilibria, stability, and composition. PRQ: BIOS 316 or consent of department.

590. TOPICS IN MOLECULAR AND CELLULAR CONTROL MECHANISMS (3). Mechanisms of regulation of biological systems at the cellular and molecular levels, considering current scientific literature. May be repeated to a maximum of 9 semester hours as topic varies. PRQ: BIOS 470X or consent of department.

591. RECOMBINANT DNA TECHNIQUES LABORATORY (3). Advanced experiments using recombinant DNA techniques. PRQ: Consent of department.

599. MASTER’S THESIS (1-9). Research leading to writing of a master’s thesis. Students are eligible to register only after their research problems have been approved. May be repeated. A maximum of 12 semester hours of combined credit in BIOS 599 and BIOS 670 may be applied toward the master’s degree. PRQ: Consent of department.

600. SPECIAL TOPICS IN BIOLOGY (1-9).
A. Physiology
B. Development and Morphogenesis
C. Genetics
D. Microbiology
E. Ecology/Environmental Biology
G. Evolution
J. Systematics
K. Molecular Biology
M. Research Methods
Lectures, discussions, and reports on topics of special interest in a particular field of biology. One to 9 semester hours as scheduled; each credit may be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

661. SEMINAR (1).
A. Microbiology
B. Ecology and Evolution
D. Cell Biology
E. Plant Sciences
May be repeated to a maximum of 12 semester hours, but no more than 4 semester hours may be counted toward the M.S. degree.
Department of Chemistry and Biochemistry (CHEM)

Chair: Joe W. Vaughn

Graduate Faculty

Steven M. Bachrach, professor, Ph.D., University of California, Berkeley
Gary M. Baker, associate professor, Ph.D., Purdue University
David S. Ballantine, Jr., associate professor, Ph.D., University of Maryland
Jon W. Carnahan, associate professor, Ph.D., University of Cincinnati
Robert F. Cunico, professor, Ph.D., Purdue University
James E. Erman, professor, Distinguished Research Professor, Ph.D., Massachusetts Institute of Technology
Elizabeth R. Gaillard, assistant professor, Ph.D., University of Texas
Arnold E. Hampel, professor, Distinguished Research Professor, Ph.D., University of California, Berkeley
Gary M. Baker, associate professor, Ph.D., Purdue University
Chhiu-Tsu Lin, professor, Ph.D., University of California, Los Angeles
W. Roy Mason III, professor, Ph.D., Emory University
John L. A. Mitchell, professor, Distinguished Research Professor, Ph.D., Princeton University
Lee Sunderlin, assistant professor, Ph.D., University of California, Berkeley
Petr Vanysek, associate professor, Ph.D., Czechoslovak Academy of Sciences
Joe W. Vaughn, professor, Ph.D., University of Kentucky
Chong Zheng, associate professor, Ph.D., Cornell University

The Department of Chemistry and Biochemistry offers programs leading to the M.S. and Ph.D. degrees. Bulletins describing graduate programs in chemistry are available from the department chair.

Admission to graduate programs in chemistry requires a baccalaureate degree including mathematics through differential equations. Consideration may also be given to applicants with degrees in related areas.

Master of Science in Chemistry

Students who wish to enter the M.S. program in chemistry should have a baccalaureate degree in a life, physical, or mathematical science, including one year of physics; one year of general chemistry; one year of physical chemistry; mathematics through differential equations; and four courses in other areas of chemistry at the 300-400 level. Students deficient in these requirements may satisfy them after admission, but the courses may not be taken for graduate credit and must be approved by the Graduate Program Committee after consultation with the department faculty in the student's primary area of interest. These deficiencies must be satisfied with a grade of C or better during the first two semesters of enrollment in the program.

Prior to registration the student is required to take background examinations in the fields of analytical, inorganic, organic, and physical chemistry. These examinations are usually given a week before registration to aid the adviser in the preparation of a course of study for the student. A passing level has been established so that these examinations can also serve as proficiency examinations for required undergraduate courses. (Students will be informed in advance that undergraduate deficiencies may be satisfied in this manner.)

A minimum of 30 semester hours of graduate work is required. The student must successfully complete a minimum of five courses (15 semester hours), of which at least 9 semester hours are to be in chemistry, for graduate credit. At least one of these courses must be in physical chemistry, and a minimum of two courses must be outside the primary area of study. Only graduate courses from accredited institutions in which the student has earned a grade of B or better may be accepted towards an advanced degree, subject to approval of the department and the Graduate School.

CHEM 515, Chemistry Seminar, must be taken each semester.

A thesis incorporating the results of an approved research problem and successfully defended as part of a comprehensive oral examination is required. CHEM 599, Research: Master's Thesis, should be taken as soon as possible, with enrollment to continue each semester until graduate work terminates.

The student must fulfill all requirements for the M.S. degree within four consecutive years from entry into the program.

Doctor of Philosophy in Chemistry

The prospective candidate for the Ph.D. in chemistry may do advanced study and research in analytical, biological, inorganic, organic, or physical chemistry.

Students who wish to enter the Ph.D. program should have a baccalaureate degree in a life, physical, or mathematical science, including one year of physics; one year of general chemistry; one year of physical chemistry; mathematics through differential equations; and four courses in other areas of chemistry at the 300-400 level. Students deficient in these requirements may satisfy them after admission, but the courses may not be taken for graduate credit and must be approved by the Graduate Program Committee after consultation with department faculty in the student's primary area of interest. These deficiencies must be satisfied with a grade of C or better during the first two semesters of enrollment in the program.

Course Requirements

A minimum of eight courses (24 semester hours), of which at least 15 semester hours are to be in chemistry, must be taken for graduate credit. At least one of these courses must be in physical chemistry, and a minimum of three courses must be outside the major area.

Only graduate courses from accredited institutions in which the student has earned a grade of B or better may be accepted towards an advanced degree, subject to approval of the department and the Graduate School.

CHEM 515, Chemistry Seminar, must be taken each semester. This requirement is in addition to the 24 semester hours of required course work.
The student must complete the degree requirements with a cumulative GPA of 3.20 or above in all NIU graduate course work included on the doctoral program of courses.

Chem 699, Doctoral Research and Dissertation, should be taken as soon as possible after passing the qualifying examination, with enrollment to continue each semester until graduate work terminates. The research adviser will be chosen in the second term after admission to the graduate program.

**Examinations**

Background examinations are required at the time of entering the program (described above in the requirements for the master's degree).

A qualifying examination must be satisfactorily completed in the primary area. This examination will test comprehensive knowledge of the area at the graduate level. Each division will establish the graduate course(s) in the division which will contribute towards the material upon which the examination is based. The qualifying examination must be taken no later than the fourth semester of enrollment as a graduate student. Students must have a GPA of at least 3.20 in previous graduate work to attempt the examination. A prospective doctoral candidate who has received an M.S. degree in chemistry from NIU must take the examination at the first offering following the awarding of the M.S. degree. Qualifying examinations will be given three times a year, in September, January, and May. A student who fails to pass this examination must retake it at the next offering. Failure on the second attempt will terminate further work toward the doctorate but not the master's degree.

Within one year of passing the qualifying examination in the primary field, the student must complete a research oral examination on his or her field of research encompassing the background literature in the area, the current state of the student's research, and the proposed direction of the research. The examination committee will be formed from faculty representing the primary area and a secondary area and will constitute the student's examining committee for all future examinations, with the addition of an extradepartmental representative for the final dissertation oral defense. The student's research adviser will chair the research oral committee. This examination will serve as the admission to candidacy examination. A student who fails to pass this examination must retake it no earlier than four nor later than six months after the first attempt. Failure on the second attempt will terminate further work toward the doctorate.

Each doctoral candidate will give an oral presentation of her or his research once a year. The student's examining committee will evaluate the presentation and inform the student of its opinion in writing.

Appeals against dismissal for failure to satisfy above examination requirements shall be directed to the Graduate Program Committee, whose recommendation shall be passed on to the faculty. The decision of the latter shall be final.

**Language/Skill Requirement**

After admission to the graduate program in chemistry, the student must demonstrate proficiency in computer programming or in German, French, or Russian. The student's adviser and Doctoral Guidance Committee must approve how the student will satisfy this requirement. The computer programming requirement may be satisfied by receiving a grade of A or B in CSCI 220 (Pascal), CSCI 230 (FORTRAN), CSCI 240 (C), or CSCI 360 (Assembler), or by a proficiency examination in one of these courses. Reading proficiency in a foreign language may be satisfied in French, German, or Russian by demonstrating average proficiency on the Graduate School Foreign Language Test, or on a translation examination, administered by the Office of Testing Services, or by receiving a grade of A or B in FLFR 201, FLGE 201, or FLRU 201.

**Dissertation**

The student must complete an approved research problem and incorporate the results in a dissertation. The dissertation will be a substantial contribution to knowledge in which the student exhibits original scholarship and the ability to conduct independent research. A successful defense of the dissertation before the student's doctoral committee is required for its final approval.

**Limitation of Time**

All requirements for the Ph.D. degree in chemistry must be completed within seven consecutive years from entry into an NIU graduate program in chemistry.

**Course List**

**Course numbering system.** Courses offered by the Department of Chemistry and Biochemistry are divided into different areas as a general guide to students using the following numbering system:

- 00, special topics
- 15, seminar
- 01 to 19, general chemistry
- 20 to 29, analytical chemistry
- 30 to 39, organic chemistry
- 40 to 50, physical chemistry
- 51 to 59, special laboratory and research areas
- 60 to 69, inorganic chemistry
- 70 to 79, biochemistry
- 80 to 99, research, dissertation, and miscellaneous

**405. CHEMICAL INSTRUMENTATION (3).** Measurements of signals generated by chemical instrumentation. Applications of active and passive components in amplifiers, comparison circuits, filter circuits, and mathematical function circuits in relation to chromatographic, electroanalytical, and spectrochemical systems. Electrical noise as a function of frequency is discussed in the context of signal sampling and achieving maximum signal-to-noise ratios. Analog and digital data acquisition and computer controlled measurements. Two lectures and 3 hours of laboratory per week. PRQ: CHEM 440 or consent of department. CRQ: MATH 334 or consent of department.

**425. INSTRUMENTAL METHODS OF ANALYSIS (4).** Fundamentals of physicochemical techniques of chemical analysis. Interpretations and applications of electrical, optical, thermal, and magnetic measurements in chemical analysis. Three lectures and one 4-hour laboratory period a week. Not offered for graduate credit for chemistry majors. PRQ: CHEM 325 and either CHEM 441 or CHEM 442, or consent of department.

**435. PHYSICAL METHODS IN ORGANIC CHEMISTRY (3).** Application of spectroscopic techniques to the determination of organic structures. PRQ: CHEM 441 or CHEM 442, or consent of department.

**440. PHYSICAL CHEMISTRY I (3).** Study of the gaseous, liquid, and solid states; thermodynamics; chemical equilibrium; and kinetic theory. Three lectures a week plus a recitation section. Not offered for graduate credit for chemistry majors. PRQ: CHEM 211, PHYS 251A, and MATH 232, or consent of department.

**441. PHYSICAL CHEMISTRY II (3).** Atomic and molecular structure, spectrophotometry, kinetics, and chemical statistics. Three lectures a week plus a recitation section. Not offered for graduate credit for chemistry majors. PRQ: CHEM 440 and either MATH 334 (preferred) or MATH 336 or consent of department.

**442. PRINCIPLES OF PHYSICAL CHEMISTRY (4).** Crosslisted as BIOS 443X and GEOL 443X. A one-semester course intended for chemistry majors pursuing Emphases 2, 3, or 4. Also suitable for non-majors desiring a course in physical chemistry. Topics covered are thermodynamics, chemical kinetics, and atomic and molecular structure. Not offered for graduate credit for chemistry majors. Four lectures a week. PRQ: CHEM 211, PHYS 251, and MATH 230, 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.
447. PHYSICAL CHEMISTRY LABORATORY (2). Modern experimental techniques and underlying theoretical principles for thermodynamics, chemical kinetics, spectroscopy, and structure of molecules, introduction to computer methods in physical chemistry. One lecture and one 4-hour laboratory period a week. Not offered for graduate credit for chemistry majors. PRQ: CHEM 442; or CRQ: CHEM 441; or consent of department.

450. INORGANIC CHEMISTRY II (3). Introduction to bonding and structure of transition metal complexes. Descriptive chemistry of the first row transition elements including reactions, structures, electronic spectra, and magnetic properties. Selected topics from the heavy transition elements, the lanthanides and the actinides. Not offered for graduate credit for chemistry majors. Three lectures per week. PRQ: CHEM 325, CHEM 337, CHEM 360, and either CHEM 441 or CHEM 442, or consent of department.

454. 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. Not offered for graduate credit for chemistry majors. One 4-hour laboratory per week. PRQ: CHEM 332 or CHEM 339 or consent of department. PRQ or CRQ: CHEM 460 or consent of department.

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. Not offered for graduate credit for chemistry majors. One 4-hour laboratory per week. PRQ: CHEM 332 or CHEM 339 or consent of department. PRQ or CRQ: CHEM 460 or consent of department.

463. INORGANIC CHEMISTRY III (3). Chemical applications of group theory including vibrational spectra, molecular orbitals, and ligand field theory. Theoretical basis for physical methods in inorganic chemistry. Selected topics in modern structure inorganic chemistry: organometallic compounds, cluster compounds including rings and polymers, and bioinorganic chemistry. Three lectures a week. PRQ: CHEM 460 or consent of department.

470. GENERAL BIOLOGICAL CHEMISTRY (3). Crosslisted as BIOS 470X. Overview of biochemistry including structure, properties, function, and metabolism of biologically important compounds. PRQ: CHEM 331 or CHEM 337, or consent of department.

471. BIOCHEMICAL 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. PRQ: CHEM 321 or CHEM 325, or consent of department. CRQ: CHEM 470 or CHEM 472, or consent of department.


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. ADVANCED BIOCHEMICAL TECHNIQUES (3). Crosslisted as BIOS 474X. Theory and practice in the use of techniques for the isolation and characterization of macromolecules, such as ultrafiltration, amino acid analysis, ultracentrifugation, optical rotatory dispersion, circular dichroism, absorption spectroscopy, calorimetry, and rapid reaction kinetics. Two 4-hour laboratory periods including one hour of lecture a week. PRQ: CHEM 471 or consent of department.

495X. TEACHING OF PHYSICAL SCIENCES (3). PHYS 495. Preparation for certification in grades 6-12 in one or more of the fields of physical science: physics, chemistry, earth science, 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. Includes 15 clock hours of clinical experience. Not offered for graduate credit for chemistry majors. PRQ: Consent of department.

500. SELECTED TOPICS IN CHEMISTRY (1-3). A. Inorganic B. Analytical C. Organic D. Physical E. Biological Lecture and discussions of special topics for beginning graduate students. One to 3 semester hours as scheduled; course may be repeated up to a maximum of 9 semester hours. PRQ: Consent of department.

515. CHEMISTRY SEMINAR (1/2). Required of graduate students each semester in residence except summer session. May be repeated to a maximum of 8 semester hours. PRQ: Consent of department.

522. ADVANCED ANALYTICAL CHEMISTRY (3). Fundamental principles of chemical separations and measurements with emphasis on instrumental methods. New reagents and techniques are surveyed. PRQ: CHEM 441 or consent of department.

524. OPTICAL METHODS IN ANALYTICAL CHEMISTRY (3). Theoretical and practical applications of spectral measurements to research and chemical analysis, with emphasis on emission and absorption spectrometry in the principal regions of the electromagnetic spectrum. PRQ: CHEM 425 or consent of department.

531. 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.

532. PHYSICAL ORGANIC CHEMISTRY I (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.

541. CHEMICAL THERMODYNAMICS (3). Fundamental laws of thermodynamics and applications to chemical problems. Calculation of thermodynamic quantities. PRQ: CHEM 441 or consent of department.

542. KINETICS (3). Theories and applications of rates of chemical reactions including reactions in the gas phase and in solution. Applications of kinetics in the determination of reaction mechanisms. PRQ: CHEM 441 or consent of department.

543. QUANTUM CHEMISTRY I (3). Postulational basis of quantum theory. The time-independent Schrodinger equation and its applications. Operator techniques are emphasized. PRQ: CHEM 446 and either MATH 334 or MATH 336, or consent of department.

545. ELECTROANALYTICAL CHEMISTRY (3). Theory, practice, and applicability of electrical measurements in analysis and research. Traditional as well as contemporary techniques of electroanalytical chemistry and electrochemical kinetics are emphasized. PRQ: CHEM 425 or consent of department.

570. ENZYMES (3). Basic principles of the concepts of enzyme kinetics, theory and design of experimental methods, and interpretation of enzyme mechanisms. Three lectures a week. PRQ: CHEM 470 or consent of department. Recommended: CHEM 542.

575. PHYSICAL CHEMISTRY OF MACROMOLECULES (3). Comprehensive introduction to the use of physical chemistry in the study of macromolecules. Three lectures a week. PRQ: CHEM 441 or consent of department.

589. IN-SERVICE EXPERIENCE IN CHEMISTRY (1-4). Work individually or in small groups in an academic, industrial, or government setting under the guidance of a professional staff member(s) in an approved lecture and/or laboratory program. May be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

599. RESEARCH: MASTER'S THESIS (1-15). The individual investigation of a special problem under the supervision of an advisor. This work normally culminates in the writing of the thesis. May be repeated, but only a maximum of 15 semester hours may be applied toward the M.S. degree. PRQ: Consent of department.

600. SPECIAL TOPICS IN CHEMISTRY (1-3). A. Inorganic B. Analytical C. Organic D. Physical E. Biological Lectures, discussions, and reports on topics of special interest in a particular field of chemistry. One to 3 semester hours as scheduled; course may be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

699. DOCTORAL RESEARCH AND DISSERTATION (credit arranged). May be repeated with permission of the department.
Department of Communication (COMS, JOUR)

Chair: Lois S. Self

Graduate Faculty

Communication Studies

Gretchen Bisplinghoff, assistant professor, Ph.D., Northwestern University
Ferald J. Bryan, associate professor, Ph.D., University of Missouri
Gary Burns, associate professor, Ph.D., Northwestern University
Patrice M. Buzzanell, associate professor, Ph.D., Purdue University
Jeffrey Chown, associate professor, Ph.D., University of Michigan
Arthur P. Doederlein, assistant professor, Ph.D., Northwestern University
Mary S. Larson, associate professor, Ed.D., Northern Illinois University
Robert Miller, associate professor, Ph.D., Northwestern University
M. Jack Parker, associate professor, Ph.D., Southern Illinois University
Kathleen Propp, associate professor, Ph.D., University of Iowa
Abraham Z. Bass, associate professor, Ph.D., University of Minnesota
Orayb Najjar, assistant professor, Ph.D., Indiana University
Patrice M. Buzzanell, associate professor, Ph.D., Purdue University
Gary Burns, associate professor, Ph.D., Northwestern University
Joseph Scudder, associate professor, Ph.D., Indiana University
Lois S. Self, associate professor, Ph.D., University of Wisconsin
Steve Wilson, associate professor, Ph.D., Purdue University

Journalism

Abraham Z. Bass, associate professor, Ph.D., University of Minnesota
Orayb Najjar, assistant professor, Ph.D., Indiana University
Angela M. Powers, associate professor, Ph.D., Michigan State University
Anthony J. Scantlen, associate professor, Ph.D., United States International University

The Department of Communication offers a graduate program leading to the M.A. degree in communication studies. This graduate program is adapted to the student's individual needs and academic background. Each student plans a program in consultation with an adviser from the graduate faculty of the department. With the approval of the adviser, the student may elect a maximum of 12 semester hours in allied studies in other departments.

With the adviser's consent, the student may choose to pursue the degree with or without a thesis. The number of credits transferred from another school or taken as a student-at-large to be approved as part of the student's program of courses will be determined by the student's departmental advisory committee.

All applicants from countries where English is not the native language must submit their scores from the Test of Spoken English (TSE) as part of their application for admission to graduate study in communication studies.

Master of Arts in Communication Studies

A student may pursue the primary portion of graduate study for the M.A. in communication studies in communication theory, rhetorical studies, or media studies.

Requirements

The student must earn a minimum of 30 semester hours of graduate credit and must take at least one graduate-level course in each in communication theory, rhetorical studies, and media studies. A student who plans a teaching career must take at least one graduate course in communication education. COMS 591, Research in Communication Studies (3), is required of all students and must be taken during the first 12 semester hours of graduate work.

Although a student may concentrate graduate study in one area of communication studies, the adviser reserves the right to require courses in several areas if the student's academic background is deficient in certain basic courses; the student may choose to focus on several areas.

With the adviser's advice and consent, the student must fulfill the requirements of either the thesis or non-thesis option.

Thesis Option

A thesis must be submitted and approved. From 3 to 6 semester hours may be allotted to thesis research and writing. A maximum of 6 semester hours may be taken in a combination of COMS 597, Directed Individual Study, and COMS 599, Master's Thesis.

During the semester in which degree requirements are completed, the student must pass a written examination (6-7 hours) which will assess knowledge and ability in the area of special interest. The student must pass an oral examination on the thesis or on the thesis and course work.

Non-Thesis Option

A maximum of 3 semester hours may be earned in COMS 597, Directed Individual Study.

During the semester in which degree requirements are completed, the student must pass a written examination (8-9 hours) and an oral examination, both of which will assess knowledge and ability in the area of special interest.

The comprehensive examination includes the submission by the student, for evaluation by the committee, of an expanded scholarly paper growing out of previous course work or directed individual study.

Course List

Communication Studies (COMS)

Communication Theory

402. GROUP COMMUNICATION (3). The nature of group processes. Leadership, communication, and decision-making problems in small groups.
404. COMMUNICATION THEORIES (3). The role of spoken communication in social adaptation. Relationships among thought, language, and expression; verbal perception and cognition; communication models. PRQ: COMS 252 or consent of department.

405. ADVANCED INTERPERSONAL COMMUNICATION (3). Examination and application of interpersonal communication theory.

461. ORGANIZATIONAL COMMUNICATION (3). Communication systems within and among organizations; types and components of communication systems; the effects of communication systems on values, productivity, morale, and dispersion of responsibility. Normally not available for credit to graduate students in communication studies.

475. HEALTH COMMUNICATION (3). Communication competencies needed by health care providers and consumers.

480. COMMUNICATION AND CONFLICT MANAGEMENT (3). Communication principles and techniques in relation to conflict management and negotiation; emphasis on interpersonal and organizational contexts.

507. SEMINAR IN SMALL-GROUP COMMUNICATION (3). Theories of communication in small-group interaction, especially in decision-making and conflict resolution; examination of the experimental literature.

510. SYMBOLIC BEHAVIOR AND COMMUNICATION (3). Description of the nature of symbols and the major forms of symbolic systems used in speech communication.

561. SEMINAR IN INTERNAL ORGANIZATIONAL COMMUNICATION (3). Analysis of communication systems in complex organizations with a focus on communication and organizational goals. Research methodologies emphasizing field study methods.

562. SEMINAR IN INTERCULTURAL COMMUNICATION (3). Intensive study of the means whereby individuals communicate, perpetuate, and develop their world views and ethos, with emphasis on the nature and function of communication among, between, and/or within cultures.

563. SEMINAR IN INTERPERSONAL COMMUNICATION (3). Exploration of the functions of interpersonal communication such as uncertainty reduction, social support, self-presentation, influence, and relationship maintenance; examines sociocultural expectations for verbal and nonverbal interaction.

564. SEMINAR IN COMMUNICATION THEORY (3). Analysis of motives for developing and criteria for evaluating communication theories. Introduces empirical, interpretive, and critical communication theories, including theories focused on specific contexts such as close relationships, organizational networks, and media processing.

571. SEMINAR IN ORGANIZATIONAL LEADERSHIP AND COMMUNICATION (3). Communication in the development and practice of leadership in modern organizations. Theory and research concerning leadership and communication.

572. SEMINAR IN ORGANIZATIONAL DEVELOPMENT AND COMMUNICATION (3). Use of communication to identify performance gaps and direct informed organizational change. Theory and research concerning the central role of communication in organizational development.

573. SEMINAR IN EXTERNAL ORGANIZATIONAL COMMUNICATION (3). Focus on such functions as public relations, marketing, advertising, lobbying, fund raising, long-range planning, government relations, crisis management, sales, and media relations. Theory and research concerning the use of external communication in accomplishing organizational goals.

580. SEMINAR IN CONFLICT MANAGEMENT AND NEGOTIATION (3). Communication theory and research about conflict management, negotiation/bargaining, and mediation; emphasis on interpersonal, group, and organizational contexts.

607. SEMINAR IN PERSUASION (3). Selected areas of research on persuasion and application of various theories to persuasive situations such as political campaigns, advertising, and social issues. May be repeated to a maximum of 9 semester hours provided there is no duplication of subject matter.

672X. SEMINAR IN LANGUAGE (3). COMD 672. Theories and research on speech and language acquisition from infant vocalizations to the decoding and encoding of abstract concepts; description, measurement, and analysis of normal and variant language patterns. May be repeated to a maximum of 9 semester hours.

Rhetorical Studies

400. RHETORICAL THEORY AND CRITICISM (3). Classical and modern rhetorical theories; methods for analysis and appraisal of rhetoric. PRQ: COMS 252 or consent of department.

401. CONTEMPORARY SPEAKERS AND SPEECHES (3). Analysis and evaluation of public speeches and speakers representative of contemporary thought.

403. FREEDOM OF SPEECH AND COMMUNICATION ETHICS (3). The social responsibilities of the public and private oral communicator, as sender and receiver; the issues of freedom of speech and exploration of problems of ethics in speech communication.

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.

500. THE CLASSICAL TRADITION IN RHETORICAL THEORY (3). Foundations of rhetoric, emphasizing the contributions of Plato, Aristotle, Cicero, and Quintilian, and selected medieval, Renaissance, and post-Renaissance rhetorical theorists.

502. CONTEMPORARY RHETORICAL THEORY (3). Issues in rhetorical theory construction, trends in 20th-century rhetorical theorizing, and the approaches to rhetorical theory of such figures as Kenneth Burke, I.A. Richards, Richard M. Weaver, Chaim Perelman, Stephen Toulmin, Ernesto Grassi, Michel Foucault, and Jurgen Habermas.

503. THE RHETORIC OF CONTROVERSY (3). While subject matter will change from semester to semester, focus will be on significant public speeches throughout American history on major intellectual, social, and political issues. May be repeated to a maximum of 9 semester hours provided no major duplication of subject matter occurs.

504. METHODS OF RHETORICAL CRITICISM (3). Examination of the nature and function of rhetorical criticism in regard to diverse texts and contexts.

505. THEORY AND USES OF ARGUMENT (3). A study of modern theories of argument and a critical examination of the function of debate in the determination of public policy.

506. COMMUNICATION ETHICS (3). Conceptual perspectives for evaluation of ethics in interpersonal, small group, organizational, and mass media communication settings. Exploration of potential standards, controversial issues, and case studies. Instructional approaches to communication ethics in academic and nonacademic contexts.

519. SEMINAR IN PRESIDENTIAL RHETORIC (3). Examination of the definitional, theoretical, and methodological issues relevant to the rhetoric of the American presidency. The special focus is on the rhetorical practices of recent presidents from FDR to Reagan.

520. RHETORICAL APPROACHES TO SOCIAL MOVEMENTS (3). Examination of definitional, theoretical, and methodological issues unique to rhetorical criticism of social movements as articulated in contemporary scholarly debates such as the nature of a rhetorical movement, the role of communication in development of rhetorical movements, method(s) appropriate to study of modes of symbolic activity in rhetorical movements, and the ethical status of the critic of rhetorical movements. Issues explored through consideration of particular case studies.

540. SEMINAR IN COMMUNICATION AND GENDER (3). Examination of the relationship between communication and gender, current research regarding gender differences in communication, theoretical and critical perspectives that emphasize gender, and contemporary communication problems and issues for which gender plays a pivotal role (e.g., pornography and sexual harassment).

660. SEMINAR IN RHETORIC (3). Alternative critical perspectives, political rhetoric, the rhetoric of social protests, and communication in community-action groups. May be repeated to a maximum of 9 semester hours provided there is no duplication of subject matter.

Media Studies

426. FIELD PRODUCTION AND POST PRODUCTION (3). Production of video or film projects utilizing single-camera, on-location shooting and shot-by-shot editing, combined with sound track mixing and visual special effects. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail. PRQ: COMS 358 or consent of department. CRQ: COMS 463 or consent of department.
449. AUDIO PRODUCTION (3). Production of radio programs or other audio projects of a complex nature, emphasizing recording, editing, and mixing techniques. PRQ: COMS 358 or consent of department.

450X. INSTRUCTIONAL TELEVISION I (3). LEIT 450. Practical methods for the use of television in educational settings. Studio experience in the preparation and presentation of televised instructional units. Not open to students with credit in COMS 357 or COMS 358 or equivalent.

454. TRANSNATIONAL COMMUNICATION AND MEDIA (3). A 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). The development, structure, theory, and functions of legal controls and ethical constraints on media production and programming.

456. HISTORY OF FILM (3).
   A. Before 1900
   B. 1900 to 1930
   C. Before 1950
   D. After 1950

   May be repeated to a maximum of 6 semester hours provided no repetition of subject matter occurs.

457. THE DOCUMENTARY TRADITION (3). Theories, techniques, history, and criticism of the documentary.

458. THE TELEVISION NEWS DOCUMENTARY (3). In-depth reporting on television news. May be repeated to a maximum of 9 semester hours provided topic varies. No more than 3 semester hours may be applied to the M.A.

459. HISTORY OF BROADCASTING (3). The history of radio and television broadcasting in the United States from its inception to the present.

460. BROADCASTING THEORY AND CRITICISM (3). Major theoretical and critical perspectives or analysis of broadcasting.

462. FILM THEORY AND CRITICISM (3). Major theoretical and critical perspectives for analysis of film.

463. STUDIO PRODUCTION (3). Production of studio-based programs utilizing multiple cameras in a live or live-on-tape format. PRQ: COMS 358 or consent of department. CRQ: COMS 426 or consent of department.

466. NARRATIVE SCRIPTWRITING (3). Focus on structure, development, and execution of a 100-page narrative fiction script for media. Creativity, critical ability, and discipline in writing are stressed. PRQ: COMS 355 or consent of department.

467. CORPORATE SCRIPTWRITING (3). Focus on scripting for non-broadcast settings such as corporate training packages for management development or employee orientation; public service packages for social service agencies; and educational packages for such enterprises as medical agencies. Client assessment, pre-production planning, writing for specific objectives, and script evaluation are stressed. PRQ: COMS 355 or consent of department.

469. MEDIA AND CULTURE IN IRELAND (3). Survey of Irish film and television against the historical, political, and cultural traditions of Ireland. Irish media as it has developed in competition with Hollywood and British representation of Ireland.

470. SEMINAR IN MEDIA STUDIES (3). Intensive study of selected topics in media studies. Topics will vary from semester to semester. May be repeated to a maximum of 9 semester hours provided that no repetition of subject matter occurs.

471. MEDIA STUDIES RESEARCH (3). Problems, methods, techniques, and responsibilities related to media studies research.

472. ADVANCED PROBLEMS OF MEDIA PRODUCTION (3). Techniques, theories, and criticism of production for radio, television, or film as used in television. May be repeated to a maximum of 8 semester hours provided there is no duplication of course content.

473. TOPICS IN BROADCAST MEDIA MANAGEMENT (3). Topics in the operation and management of the broadcast station in the commercial or educational field. May be repeated to a maximum of 6 semester hours provided there is no duplication of course content.

474. MEDIA AND SOCIETY (3). Primary focus on how media shape an individual's creation of social reality with regard to such areas as interpersonal communication, politics and government, religion, and community involvement.

475. THEORIES OF TELEVISION (3). Course focuses on the fundamental nature of television, how it differs from film and other media, its aesthetic characteristics, and how it is constituted technologically, industrially, and socially. Major theoretical and critical approaches to television will be examined.

476. FEMINIST FILM THEORY (3). Historical and methodological development of the feminist perspective in film analysis. The use and influence of sociological, psychoanalytical, Marxist, and semiotic tools in a feminist approach to understanding film and how it works in a patriarchal society.

477. DOCUMENTARY THEORY AND PRACTICE (3). Survey of major documentary theories. Students put theory into practice while producing their own documentary videotapes.

478. SEMINAR IN MEDIA CRITICISM (3). Course examines mass communication theories, history of media criticism, current trends in media criticism, and major critical methods.

479. INSTRUCTIONAL TELEVISION II (3). LEIT 559. Application of television production techniques to instructional activities. PRQ: COMS 450X or consent of department.

580. SPECIAL TOPICS IN COMMUNICATION STUDIES (1-3). Course content and credit varies from semester to semester. May be repeated to a maximum of 9 semester hours provided topic varies. Not more than 3 semester hours may be applied to the M.A.

584. INTERNSHIP IN COMMUNICATION STUDIES (1-12). For graduate students preparing to enter fields where internship experience is available and desirable. Study of problems related to teaching, media application, and communication systems. Experience will be supervised and evaluated. May be repeated to a maximum of 12 semester hours. No more than 3 semester hours may be included in the degree program. Grades awarded are S, U, or I.

589. RESEARCH IN COMMUNICATION STUDIES (3). Focuses on the nature and development of research questions and methods typical of scholarship in such areas as communication theory, rhetorical studies, and media studies.

591. DIRECTED INDIVIDUAL STUDY (1-6). Supervised readings and research or production of a creative project. May be repeated to a maximum of 6 semester hours. A maximum of 3 semester hours may be applied toward the M.A.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours provided that no repetition of subject matter occurs.

630. SEMINAR IN COMMUNICATION EDUCATION (3). May be repeated to a maximum of 9 semester hours provided that no repetition of subject matter occurs.

**Journalism (JOUR)**

410. NEWS EDITING (3). Advanced practice in editing and headline construction for print media, and in newspaper and newsletter page design. PRQ: JOUR 200 and a passing score on the Journalism Qualifying Examination, or consent of the department.

416. PHOTOGRAPH EDITING (3). Editing and layout of photographs in the mass media. Includes selection and preparation of photographs for use as singles, spreads, stories, and essays. PRQ: JOUR 312 and consent of department.

449. MEDIA MANAGEMENT (3). The management of mass communications organizations, with emphasis on general administration, advertising, promotion, production, research and planning.

457. THE TELEVISION NEWS DOCUMENTARY (3). In-depth reporting on location of some aspect of the contemporary scene. Students investigate, prepare scripts, and shoot and edit documentaries to be used on television. Some traveling may be required. PRQ: JOUR 357 or consent of department.

460. SPECIALIZED PRESS WRITING (3). Writing for specialized publications: research for articles, writing in the style of specialized publications, and the marketing of articles. Included will be a study of the specialized press. PRQ: JOUR 200 and a passing score on the Journalism Qualifying Examination, 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 200 and JOUR 312 and a passing score on the Journalism Qualifying Examination, 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.

481. HISTORY OF JOURNALISM (3). The development of a free press from its origins in Europe through the emergence of modern journalism. Includes the study of early newspapers, periodicals, and broadcast news programs.

482. INTERNATIONAL NEWS COMMUNICATIONS (3). A survey of the news media and international affairs; foreign correspondence and coverage; international news agencies; and country-by-country historical-societal study of foreign journalism.

483. MASS MEDIA IN MODERN SOCIETY (3). The concept and role of mass communications; rights, restrictions, and responsibilities of the mass media; and interactions of mass communications and society.

485. TOPICS IN JOURNALISM (1-3). In-depth study and discussion of current topics of special importance and interest in the field of journalism, including the background of the topics and their relationship to other fields. May be repeated to a maximum of 6 semester hours when topics vary. PRQ: Consent of department.

490. ETHNIC MINORITIES AND THE NEWS MEDIA (3). The press of ethnic minorities and its relationship to other mass media. Study of the problems and responsibilities faced by mass communicators in relating to ethnic minorities. Includes individual investigation and reporting.

492. INTERNSHIP IN JOURNALISM (3). A work experience program 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. PRQ: Consent of department.

502. REPORTING OF PUBLIC AFFAIRS (3). An advanced study and application of investigative, interpretive, and in-depth reporting of public affairs. Emphasis on social, political, and economic news as it is developed and reported at the local, state, and federal levels. Course combines practical reporting experiences with seminar discussions and research investigations.

521. SEMINAR IN SPECIAL TOPICS IN JOURNALISM (3). May be repeated to a maximum of 6 semester hours when topics vary. PRQ: Consent of department.

535. PUBLIC RELATIONS CASES, CONCEPTS, AND CAMPAIGNS (3). Practice in planning and conducting campaigns to achieve specific goals and to anticipate and solve specific public relations problems, including pre- and post-testing to measure results. Case method approach.

552. SEMINAR IN BROADCAST NEWS (3). Development, structure, and future of radio-television journalism and its role in society; consideration of contemporary problems, practices, and research.

580. READINGS IN JOURNALISM (3). A selected review of journalism literature, including books, research studies, and periodicals.

582. THE PRESS AND WORLD AFFAIRS (3). Communication problems of the press in international affairs; a detailed study of international news agencies and services; investigation of the foreign press by countries with emphasis on the press under fascism, communism, and democracy; and world censorship.

583. SEMINAR IN PRESS PROBLEMS (3). Selected problems in press freedom, federal-local censorship, press privileges, display and suppression of news, and the public's right to know. Also selected problems in influences of the press on social, economic, and political affairs; public opinion; and the formation of thought processes. May be repeated to a maximum of 6 semester hours when topics vary.

590. INDEPENDENT STUDY (1-3). Open to qualified students who wish to do individual advanced work in journalism or mass communications. PRQ: Consent of department.

599. THESIS (1-3). PRQ: Consent of department.
Department of Computer Science (CSCI)

Chair: Rodney Angotti

Graduate Faculty
Rodney Angotti, associate professor, Ph.D., University of Pittsburgh
Kathi Davis, associate professor, Ph.D., Illinois Institute of Technology
Barnett W. Glickfeld, associate professor, Ph.D., Columbia University
George Henry, associate professor, Ed.D., Northern Illinois University
Nicholas T. Karonis, assistant professor, Ph.D., Syracuse University
H. Joel Jeffrey, professor, Ph.D., University of Colorado
Barnett W. Glickfeld, associate professor, Ph.D., Columbia University
Kathi Davis, associate professor, Ph.D., Illinois Institute of Technology
Neil Rickert, professor, Ph.D., Yale University
Robert Zerwekh, associate professor, Ph.D., University of Illinois

For admission to the graduate program in computer science, students must have a thorough knowledge of the programming language C, advanced aspects of COBOL, and assembler language for third generation computers. Students who are admitted with stipulated deficiencies must earn a grade of B or higher in each of their stated deficiency courses.

Graduate students and students-at-large may not audit or elect to complete computer science courses on a pass/fail basis without obtaining prior permission from the Department of Computer Science.

Master of Science in Computer Science

Students pursuing the M.S. in computer science must complete at least 30 semester hours of graduate work. At least seven of these 3-semester-hour courses must be 500-level graduate courses, and at least 24 of the 30 required semester hours must be earned in courses offered by the Department of Computer Science. Prior departmental approval must be obtained to count courses not offered by the Department of Computer Science toward the 30 required semester hours.

A program of study designed by the student and the adviser must be approved by the Department of Computer Science.

The student must pass a comprehensive examination in computer science. Students pursuing full-time graduate study will be required to take the comprehensive examination within two academic years of admission to the Graduate School.

Required Courses
CSCI 464, Data Structures (4)
CSCI 468, Systems Programming (4)
At least three of the following (9)
  CSCI 562, Analysis of Data Processing Systems (3), OR CSCI 563, Systems Design and Analysis (3)
  CSCI 564, Database Systems (3), OR CSCI 588, Database Concepts (3)
  CSCI 565, Software for Teleprocessing (3), OR CSCI 566, Local Networks (3)
  CSCI 567, Applied Systems Programming (3), OR CSCI 568, Advanced Systems Programming (3)

If a graduate student in the M.S. program has already completed a required 400-level course with a grade of C or better as an undergraduate at NIU, that course requirement will be waived in the student's M.S. program. Other graduate course work will be substituted to complete the required program.

Course List

434X. NUMERICAL LINEAR ALGEBRA (3). MATH 434. Roundoff errors and computer arithmetic. Direct and iterative methods for solving linear systems, norms and condition numbers, iterative refinement. Linear least squares problems: the normal equations and QR approach for overdetermined systems. Numerical methods for eigenvalues: an introduction to the QR iteration. The course makes extensive use of computers. PRQ: MATH 232, MATH 240, and either CSCI 230 or approved equivalent, or consent of department.


440. DATA STRUCTURES AND ALGORITHM ANALYSIS (4). The application of analysis and design techniques to nonnumeric algorithms acting on data structures. The utilization of algorithmic analysis and design criteria in the selection of methods for data manipulation. Computing projects will be done in a high-level computing language. Laboratory projects. PRQ: CSCI 240 and CSCI 360, or consent of department.

461. TECHNIQUES OF COMPUTER PROGRAMMING AND ALGORITHMIC PROCESSES (3). An advanced course in algorithmic processes and computer programming. A major higher-level language will be used in developing applications and the solutions of current problems. Knowledge of programming is required. PRQ: Consent of department.

462. INTRODUCTION TO THE FOUNDATIONS OF COMPUTER SCIENCE (3). An introduction to mathematical languages, automata theory, and the theory of recursive functions and computability. PRQ: MATH 232 or MATH 240, and CSCI 230, CSCI 240, or CSCI 250, or consent of department.

463. COMPUTER SYSTEMS ORGANIZATION (3). Organization and use of distributed computer systems. Basic concepts and examples from microcomputers and networks, peripheral components, data communications, and the organization of operating systems such as UNIX and DOS. Extensive laboratory work. PRQ: CSCI 360 or consent of department.

464. DATA STRUCTURES (4). An in-depth study of the theory and the programming techniques related to the storage and management of various forms of data. The programming assignments require an advanced understanding of assembler language. Extensive laboratory work. PRQ: CSCI 360 or consent of department.

465. EXTERNAL DATA STRUCTURES (4). Formal organization of files, organization techniques using direct access, and indexed sequential and sequential files. Advanced COBOL topics, Job Control Language, and access methods and utilities with applications to data processing. Extensive laboratory work. PRQ: CSCI 250 and CSCI 360, or consent of department.
566. DATABASE/DATA COMMUNICATIONS SOFTWARE (4). Software development in a representative current database and an on-line interactive teleprocessing system. Extensive laboratory work. PRQ: CSCI 465 or consent of department.

467. INTRODUCTION TO SYSTEMS DESIGN AND ANALYSIS (4). Phases of the systems development life cycle and the tools used by the analyst in planning, specifying, and implementing a computer-based system. Related topics include documentation standards, interaction with users, and design of interfaces including Windows. Assignments include at least one major group project. PRQ: CSCI 465 or consent of department.

468. SYSTEMS PROGRAMMING (4). A 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 consent of department.

480. THEORETICAL OPERATING SYSTEMS (4). The principles and practices of modern operating system design. Includes file systems organization; multi-tasking; windowing interfaces such as Windows or OS/2; interprocess communication, including communications across a network; and server-client models of processing. PRQ: CSCI 330 or CSCI 463, and either CSCI 440 or CSCI 464, or consent of department.

521. PARALLEL PROCESSING (3). Principles of parallel computation and advanced computer architectures. Topics include vector processors, multiprocessors, concurrency control, parallel programming environments, and software support. PRQ: CSCI 468 or CSCI 480, or consent of department.

525. PARALLEL LOGIC PROGRAMMING (3). A parallel logic programming language will be studied. Basic concepts to be examined include data structuring and destructuring, processes and their execution, and datatral and synchronizable. The fundamental techniques of producer-consumer protocols, incomplete messages, bounded buffers, difference lists, short-circuits, and blackboards will be developed and applied. PRQ: Consent of department.


532. ADVANCED PROLOG PROGRAMMING AND ARTIFICIAL INTELLIGENCE (3). A continuation of CSCI 531. Topics will include second order programming, meta-logical and extra-logical predicates, and definite clause grammars. Meta-interpreters and their application to coding expert system shells will be studied. Prolog versions of one or more small expert systems will be examined. PRQ: CSCI 531 or consent of department.

545. NEURAL NETWORKS (3). Topics will include Hopfield networks, backpropagation, competitive learning, the Kohonen feature map and counterpropagation. Applications and examples will be provided, and future directions for these networks will be discussed. PRQ: Consent of department.

551. ADVANCED COMPUTER PROGRAMMING (3). An introduction to decision support, specification, applications, and very high level programming languages. PRQ: CSCI 461 or consent of department.

562. ANALYSIS OF DATA PROCESSING SYSTEMS (3). A detailed and in-depth analysis of large and complex computerized data processing systems. PRQ: CSCI 467 or consent of department.

563. SYSTEMS DESIGN AND ANALYSIS (3). Design, implementation, and control of computer-based data processing systems. Topics include system and program specifications, language selection, forms and file design, maintenance and documentation requirements, and interface with computer users. PRQ: CSCI 467 or consent of department.

564. DATABASE SYSTEMS (3). The advantages and limitations of the use of integrated databases, as opposed to conventional file structures, will be considered. The course will include a detailed examination of at least one current system, as well as future trends. PRQ: CSCI 464 and CSCI 465, or consent of department.

565. SOFTWARE FOR TELEPROCESSING (3). Design and problems in the creation and use of computer communication networks. Detailed examination of at least one proprietary network. PRQ: CSCI 468 or consent of department.
Department of Economics (ECON)

Chair: Anthony E. Scaperlanda

Graduate Faculty

Burley V. Bechdolt, assistant chair, associate professor, Ph.D., University of Southern California
Ardeshir J. Dalai, professor, Ph.D., University of Iowa
Paul Graesser, associate professor, Ph.D., Columbia University
Stephen Karlson, associate professor, Ph.D., University of Wisconsin
Young Chin Kim, professor, Ph.D., Columbia University
Judy Temple, associate professor, Ph.D., University of Texas
Parthasaradhi Mallela, professor, Ph.D., University of Rochester
Khan A. Mohabbat, professor, Ph.D., State University of New York, Binghamton
Steven Nord, professor, Ph.D., University of Illinois
Susan Porter-Hudak, associate professor, Ph.D., University of Wisconsin
Anthony E. Scaperlanda, professor, Ph.D., University of Texas
Mark L. Skidmore, assistant professor, Ph.D., University of Colorado
George Slotsve, director of graduate studies, assistant professor, Ph.D., University of Wisconsin
Judy Temple, associate professor, Ph.D., Michigan State University
Virginia Wilcox-Gök, associate professor, Ph.D., Washington University
Martin Williams, professor, Ph.D., State University of New York, Binghamton

The Department of Economics offers graduate programs leading to the M.A. and Ph.D. degrees. A procedures manual describing graduate programs in economics in greater detail is available from the department chair or the departmental director of graduate studies.

Students who plan to pursue the graduate curriculum in economics should consult the departmental director of graduate studies before enrolling in course work. A student whose background in economics is deficient (in the judgment of the department's graduate committee) may be required to take additional course work at the undergraduate level.

Master of Arts in Economics

The M.A. in economics is suitable either for students intending to pursue a Ph.D. in economics or for those seeking a practical program of study to prepare them for technical or administrative positions in business or government.

The M.A. program in economics requires 30 semester hours of graduate credit.

Course Requirements

ECON 560, Microeconomic Analysis I (3)
ECON 561, Microeconomic Analysis II (3)
ECON 590, Econometrics I (3)

ECON 599A, Master's Thesis (6),
OR ECON 599B, Master's Research Paper (3),
OR a substantial research paper written in a 500- or 600-level economics course and approved by the professor teaching the course.

Students with an interest in applied economics are expected to enroll in ECON 597, Economic Research Practicum, and to choose elective courses in applied fields such as public economics, labor economics, or urban and regional economics for the remaining hours. Those whose interests are in general economics or who plan to enter the Ph.D. program may also elect work in non-applied areas. In either case, with the prior written consent of the director of graduate studies, students may elect to enroll in up to 6 semester hours of courses related to the student's field of study offered outside the department.

Comprehensive Examinations

Comprehensive examinations in microeconomic and macroeconomic analysis will normally be taken by each student in the master's degree program the first time that these examinations are offered following the completion of ECON 560 and ECON 561. The Department of Economics offers these examinations during the week preceding the start of each semester.

A student who fails either of these examinations twice will generally not be permitted to continue in the M.A. program. However, in extenuating circumstances a student may submit a written appeal to the department to take an examination a third and final time.

Students having a grade below B in ECON 560 will be required to pass a comprehensive examination in microeconomic theory. Those having a grade below B in ECON 561 will be required to pass a comprehensive examination in macroeconomic theory.

Doctor of Philosophy in Economics

A person who has earned the doctorate in economics is qualified both to teach economics at the university level and to do original research in academe, government, and the private sector. The doctoral program in economics features a strong core of courses in theory and econometrics and a focus on the three applied fields of labor economics, public finance, and urban and regional economics. Other fields may be approved by the department's director of graduate studies, subject to student demand and faculty availability.

Course Requirements

All doctoral students must satisfactorily complete a minimum of 60 semester hours of graduate course work, including ECON 590, Econometrics (3), ECON 660, Microeconomic Analysis II (3), and ECON 661, Macroeconomic Analysis II (3). Prerequisites for these courses include ECON 490, ECON 491T, ECON 560, and ECON 651. Students who have not satisfactorily completed these courses or their equivalents will normally be required to do so.

In addition, each student must take three courses in each of two applied fields and must earn at least a B in each field course.

Courses in the applied fields that are the primary focus of the department will be offered on a regular basis. Information about the availability of course work in other applied fields may be

1These are labor economics (ECON 500, ECON 501, ECON 600), public finance (ECON 550, ECON 551, ECON 650), and urban and regional economics (ECON 585, ECON 586, ECON 685).
obtained by consulting the department's director of graduate studies.

All doctoral students must register for ECON 698, Current Research Colloquium (1), in the fall and spring semesters.

Research-Tool Requirement

The Department of Economics research-tool requirement is fulfilled by successfully completing ECON 490, ECON 491T, and ECON 590, which are required in the doctoral program.

Admission to Candidacy

All students are required to take written and oral candidacy examinations in microeconomic theory and in macroeconomic theory. At least one of these examinations must be taken the first time they are offered after the student has completed ECON 660 and ECON 661. The other examination must be taken the next time they are offered. A student who fails either of these examinations may, with the permission of the examining committee, repeat it after the lapse of at least one semester. A student who fails either of these examinations a second time will be dismissed from the doctoral program.

After successfully completing the candidacy examinations, each student must write a research paper in one of his or her applied fields. The paper will generally serve as a basis for the student's dissertation. The department's chair and director of graduate studies will appoint a committee of three faculty members (who may later serve on the student's doctoral dissertation committee) who will evaluate the paper. Upon receiving a satisfactory evaluation, the student will be admitted to candidacy. Failure to receive a satisfactory evaluation within one year after completing the course work for the applied fields will result in dismissal from the doctoral program. Under exceptional circumstances this time limit may be extended by the department's Graduate Committee.

Course List

402. COMPARATIVE LABOR RELATIONS (3). Patterns of industrial relations systems in European and selected emerging economies. Scope of collective bargaining and social welfare legislation. Comparison between the various national labor movements. PRQ: ECON 300; ECON 360 or ECON 361; or consent of department.

403. ECONOMICS OF HUMAN RESOURCES (3). Analysis of factors affecting demand for and supply of labor. Human capital analysis, discrimination, labor market operations, and public policy. PRQ: ECON 360 or consent of department.

420. ANTITRUST ECONOMICS (3). Detailed analysis of monopoly, near-monopoly, and various business practices. Examines legal and economic foundations of current and past public policies toward monopoly. PRQ: ECON 360 or 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 FINANCE (3). Analysis of the structure and effects of the national, state, and local revenue and outlay systems. PRQ: ECON 360 or consent of department.

452. FISCAL POLICY (3). An 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 or consent of department.

454. STATE AND LOCAL FINANCE (3). Analysis of the expenditure-revenue process in state and local governments. The effect of intergovernmental grants and the future of fiscal federalism. PRQ: ECON 360 or consent of department.

466. BUSINESS CYCLES (3). History of business fluctuations; theories and techniques of analysis; countercyclical monetary and fiscal policies; and survey of selected forecasting techniques. PRQ: ECON 361 or consent of department.


474. ECONOMIC HISTORY OF THE UNITED STATES (3). The evolution and development of American economic institutions and processes from colonial times to the 20th century. The modern economic approach will be developed and applied to various topics. PRQ: ECON 260T and ECON 261T, or consent of department.

485. URBAN ECONOMIC PROBLEMS AND POLICIES (3). Economic analysis of urban growth and land use and selected urban problems such as urban transportation, public finance, housing, poverty, and environmental quality. PRQ: ECON 360 and ECON 385; or consent of department.

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.

491T. MATHEMATICAL METHODS FOR ECONOMICS (3). Mathematical methods used in economics with applications. Not open to students with credit in ECON 491. PRQ: ECON 360, ECON 361, and MATH 229, or consent of department.

493. SEMINAR IN POLITICAL ECONOMY (3). Crosslisted as POLS 493X.

496X. MATERIALS AND PROBLEMS OF HIGH SCHOOL INSTRUCTION IN THE SOCIAL SCIENCES (3). Must be taken by students seeking certification in a social science before student teaching. Includes 15 clock hours of clinical experience, attention to the teaching of exceptional students, planning for multicultural learning situations, and techniques of reading in the social sciences. PRQ: Consent of department.

497. INDEPENDENT STUDY IN ECONOMICS (3). Individually arranged study within the various fields of economics. Not open to economics graduate students. PRQ: ECON 360 and ECON 361, or consent of department.

500. LABOR MARKET ANALYSIS I (3). Wage, employment, and human resource theory, empirical findings, and policy implications. Emphasis on human capital, household production, discrimination, and other sources of wage and employment difference. PRQ: ECON 360 and consent of department.


512. MONETARY THEORY (3). Theoretical and empirical analysis of supply of and demand for money; the interrelationships between money and interest, prices, and output, with particular attention to monetary aspects of macroeconomic theory. PRQ: Consent of department.

513. MONETARY POLICY (3). Objectives and instruments of monetary policy and the supply of money, alternative monetary models, and the effectiveness and incidence of monetary policy. PRQ: Consent of department.

521. STRUCTURE OF INDUSTRY (3). Analysis of the determinants of the number of sellers in an industry, and whether industries with few sellers are less competitive, more profitable, or more innovative than those with a large number of sellers. PRQ: ECON 490 and ECON 560, or consent of department.

522. INDUSTRIAL ORGANIZATION (3). Analysis of contracts between traders, including vertical integration, price discrimination, tying contracts, requirements contracts, resale price maintenance, market division, and exclusive dealing. Additional topics include antitrust policy, patents, and other issues in law and economics. PRQ: ECON 490 and ECON 560, or consent of department.
530. INTERNATIONAL TRADE THEORY (3). PRQ: ECON 560 or consent of department.

532. INTERNATIONAL MONETARY ECONOMICS (3). PRQ: ECON 561 or consent of department.

540. THEORIES OF ECONOMIC DEVELOPMENT (3). Analytical approach to problems and obstacles to economic development in emerging societies: population problems, capital formation, investment criteria, structural and technical change, sectoral analysis, foreign trade, and others. PRQ: ECON 560 or consent of department.

550. ECONOMICS OF THE PUBLIC SECTOR (3). The economic nature of government services, public sector decision making, welfare and efficiency criteria in financing these services, and interrelationships of the public and private sectors. PRQ: ECON 360 or consent of department.

551. FINANCING GOVERNMENT ACTIVITIES (3). Budgetary policy, evaluation of different forms of taxation, pricing of government services, public borrowing and debt management, and programs of tax reform. PRQ: ECON 360 or consent of department.

560. MICROECONOMIC ANALYSIS I (3). Domestic and international price systems with regard to resource allocation, welfare, and income distribution. A brief introduction to the concepts involved in input-output analysis and linear programming. PRQ: ECON 360 and ECON 491T, or consent of department.

561. MACROECONOMIC ANALYSIS I (3). Factors determining levels of aggregate income, employment, and prices. PRQ: ECON 360, ECON 361, and ECON 491T, or consent of department.

564. SURVEY OF MARKET ECONOMICS (3). Prices, output, distribution, and industrial efficiency in alternative input and output markets; structural maladjustments, employment, and inflation; government-business relations and government-labor relations; international price systems; alternative economic systems. Not open to students who are economics majors or students who have taken ECON 360 or its equivalent. PRQ: Consent of department.

565. SURVEY OF INCOME ECONOMICS (3). Income, employment, prices and their determinants, theories of consumption, investment, taxation, fiscal, monetary and financial institutions and practices. Government debt, exchange rates, and balance of payments as influences on levels of economic activity. Not open to students who are economics majors or students who have taken ECON 361 or its equivalent. PRQ: Consent of department.

570. HISTORY OF ECONOMIC ANALYSIS I (3). A detailed treatment of the development of tools and concepts of theoretical economics up to the decline of the classical school. PRQ: Consent of department.

571. HISTORY OF ECONOMIC ANALYSIS II (3). A continuation of ECON 570 beyond the classical school to the analytics of the late 19th and early 20th centuries. PRQ: ECON 570 or consent of department.

585. REGIONAL ECONOMICS (3). Interregional trade and factor mobility, regional economic growth, economic analysis of industrial location, and quantitative methods useful in urban and regional planning with some computer applications. PRQ: Consent of department.

586. URBAN ECONOMICS (3). Economic analysis of urban location and land use, urban economic growth, and problems of urban transportation, public finance, and housing. Quantitative methods of urban analysis useful in urban planning, with some computer applications. PRQ: Consent of department.

590. ECONOMETRICS I (3). Specification and estimation of economic models with emphasis on single equation models. PRQ: ECON 360, ECON 361 and ECON 490, or consent of department. CRQ: ECON 590A.

590A. ECONOMETRICS LABORATORY (1). The use of various statistical and matrix language computer packages pertaining to econometrics. Topics include the use of such packages to perform regression, GLS, nonlinear regression, simultaneous equations, and a wide variety of other econometric techniques. CRQ: ECON 590 or consent of department.

595. SPECIAL TOPICS IN ECONOMICS (3). Topics not dealt with in other courses. May be repeated as the topic changes to a maximum of 6 semester hours. PRQ: ECON 560 and ECON 561, or consent of department.
Department of English (ENGL)

Chair. James I. Miller, Jr.

Graduate Faculty

Christine Abbott, associate professor, Ph.D., University of Illinois, Chicago
Craig S. Abbott, professor, Ph.D., University of Texas
William Baker, professor, Ph.D., University of London
David Barrow, assistant professor, Ph.D., Duke University
Gerald Berkowitz, professor, Ph.D., Indiana University
Rose Marie Bunwell, professor, Ph.D., University of Iowa
David Bywaters, associate professor, Ph.D., Washington University
Susan Callahan, assistant professor, Ph.D., University of Louisville
Edward Callary, associate professor, Ph.D., Louisiana State University
Nicole Clifton, assistant professor, Ph.D., Cornell University
Franklin E. Court, professor, Ph.D., Kent State University
Susan E. Deskins, assistant professor, Ph.D., Harvard University
Sue W. Doody, associate professor, Ph.D., Northwestern University
Philip Dust, professor, Ph.D., University of Illinois
James R. Giles, professor, Ph.D., University of Texas
Ibis Gómez-Vega, assistant professor, Ph.D., University of Houston
David Gorman, assistant professor, Ph.D., Columbia University
Donald E. Hardy, assistant professor, Ph.D., Rice University
Heather K. Hardy, professor, Ph.D., University of California, Los Angeles
Rosalie Hewitt, associate professor, Ph.D., Purdue University
William C. Johnson, professor, Distinguished Teaching Professor, Ph.D., University of Iowa
Mark Kipperman, associate professor, Ph.D., University of Pennsylvania
John V. Knock, associate professor, Ph.D., University of Illinois
Amy K. Levin, associate professor, Ph.D., City University of New York
Doris M. Macdonald, assistant professor, Ph.D., Louisiana State University
Glenn A. Meeter, professor, Ph.D., University of Iowa
James M. Mellard, professor, Ph.D., University of Texas
James I. Miller, Jr., professor, Ph.D., Harvard University
Amy Newman, assistant professor, Ph.D., Ohio University
Neal R. Norrick, professor, Ph.D., Regensburg University
Charles A. Pennel, professor, Ph.D., University of Illinois
John D. Schaeffer, associate professor, Ph.D., St. Louis University
Mary S. Schriber, professor, Distinguished Teaching Professor, Ph.D., Michigan State University
Robert T. Sell, professor, Ph.D., University of North Carolina
Reginald Shephard, assistant professor, M.F.A., University of Iowa
Sean N. Shesgreen, professor, Distinguished Research Professor, Ph.D., Northwestern University
Dale Sullivan, assistant professor, Ph.D., Rensselaer Polytechnic Institute
Diana L. Swanson, assistant professor, Ph.D., University of Minnesota
Gustaf Van Cromhout, professor, Ph.D., University of Minnesota
Lynne M. Waldeland, associate professor, Ph.D., Purdue University
William P. Williams, professor, Ph.D., Kansas State University

The Department of English offers graduate programs leading to degrees at both the master's and doctoral levels. The scores on the GRE General Test are required as admission credentials. Well-prepared students with baccalaureate degrees may begin work immediately to fulfill the requirements for the doctorate. ENGL 501, Bibliography and Methods of Research, or ENGL 508T, Research Methods in Linguistics, is required of all graduate students in English, and should be taken early in a student's program of studies.

Advising

Students are assigned a departmental adviser upon admission to a degree program and must consult their adviser before or during the first semester of course work to select courses and design a program of study to be filed with the Graduate School. After doctoral students decide on fields of study, they must select an adviser from one of their fields who must be approved by the department.

Master of Arts in English

The Department of English offers two options leading to the M.A. degree.

Students who desire a linguistic focus under either Option A or Option B will be permitted to take 15 semester hours in language courses supplemented by 15 semester hours of literature courses. The department allows a focus in literature and film for an M.A. in English under Option B. Students who desire a rhetoric focus under either M.A. Option A or Option B will be permitted to take 15 semester hours in rhetoric courses supplemented by 15 semester hours in literature courses. In the areas of focus for M.A. Options A or B (linguistics, literature and film, rhetoric) candidates will take comprehensive examinations, one half in English and American literature and one half in the area of focus.

A flexible program of courses leading to an M.A. in English has been designed for students and educators wishing to pursue careers in Teaching English to Speakers of Other Languages (TESOL). In the TESOL focus, the M.A. examination will be solely in linguistics with a particular emphasis on TESOL.

Option A

Option A is designed to prepare students for graduate work at the doctoral level and concentrates on research in the criticism of English and American language and literature. A student pursuing an M.A. under this option must earn a minimum of 30 semester hours of graduate credit in the Department of English with a GPA of at least 3.00, pass a proficiency examination in one foreign language, and pass a comprehensive examination. Foreign language proficiency may be demonstrated in French, German, Greek (classical or koine), Italian, Latin (classical or medieval), Russian, or Spanish, or in another language approved by the director of graduate studies on the basis of demonstrated need. The student's graduate adviser may permit limited study in fields closely related to English and approve substitution of a thesis for up to 3 semester hours of the required course work. Full-time students concentrating in the usual literary or linguistic areas will normally enroll in Option A.

Option B

Option B is designed for students who are currently teaching in secondary schools or community colleges or who plan to teach at one of these levels, and for students interested in other professional pursuits, such as business or public relations, to which
a strong background in English may contribute. A graduate adviser and the student will design a program of study (subject to the approval of the director of graduate studies) which must include 9 semester hours of study in subjects other than English and American literature, such as courses in the teaching of English, rhetoric, creative writing and composition, linguistics, reading, mass media, public relations, or others that contribute to the student's professional development. A student pursuing an M.A. under this option must earn a minimum of 36 semester hours of credit, including 27 in the Department of English. The student may not take the final comprehensive examination before completing a minimum of 24 semester hours in the Department of English.

Doctor of Philosophy in English

The program of study leading to the Ph.D. degree in English at NIU is flexible in that it offers two options, one emphasizing traditional research concerns in such areas as British and American literature, language and linguistics, and literary criticism, and the other emphasizing pedagogical and related concerns in these same areas.

A graduate faculty member, after careful analysis of the applicant's background and training, will counsel the student in planning an appropriate program. Small graduate seminars conducted by active scholars enable the student to develop the critical and investigative skills and insights necessary to successful scholarship and teaching. Fellowships and teaching assistantships are available for qualified students.

Selected students who hold only a baccalaureate degree may enroll immediately in the doctoral program. Qualified full-time students should be able to complete all the requirements for the doctoral degree in four years beyond the baccalaureate degree or three years beyond the master's degree.

Admission to Candidacy

For admission to candidacy for the doctorate in English, a student must qualify for the doctoral program, after successfully completing 30 semester hours of graduate work, by passing the master's comprehensive examination or equivalent. The candidate must write a dissertation which contributes to literary or linguistic knowledge and exhibits original scholarship and the ability to conduct independent research. If a student selects the pedagogical option, the dissertation project should have direct relevance to classroom instruction. The candidate will also demonstrate a knowledge of two foreign languages, average proficiency, or one foreign language, high proficiency. The choice of languages is subject to departmental approval. The proficiency examinations must be passed before a student takes the candidacy examination. (For means of demonstrating language proficiency, refer to "Language and Research-Tool Requirement" in the front of this catalog.)

Admission

For admission to the program leading to the Ph.D. in English, the student must show evidence of ability to pursue doctoral work and secure departmental approval of a program of study.

Requirements

In consultation between the adviser and the student, each program for the doctorate shall be designed to include individual author courses in Chaucer, Shakespeare, and Milton in either the student's undergraduate or graduate program; ENGL 511 (or another graduate-level course in Old English language or Middle English language); and at least four seminars at the 600 level.

Students who select the traditional research option must include in their programs of study three graduate courses (500 or 600 level) in each of the following areas.

- British literature before 1660
- British literature after 1660
- American literature
- American literature since 1865
- American literature before 1865
- American literature since 1865
- Restoration and 18th century
- 19th century
- 20th century
- Medieval literature (Old English literature and Middle English literature)
- 16th century to 1600 (to 1616 for Shakespeare)
- 17th century to 1660 (but including Aubrey, Bunyan, Milton, Traherne, and Vaughan)
- Rhetoric
- World literature
- Language/linguistics
- History
- Psychology
- Sociology
- Anthropology
- Comparative literature
- Drama
- Foreign languages and literatures
- Linguistics
- Philosophy
- Political science
- Women's studies
- Drama
- Women's studies

Students who select the pedagogical option must include in their programs of study courses in the following areas.

- American literature (9 hours)
- British literature (9 hours)
- Literary criticism (3 hours)
- Rhetoric (3 hours)
- World literature (6 hours)
- Language/linguistics (6 hours beyond ENGL 511)

Students may select a secondary field consisting of a program of not more than 12 semester hours of closely related courses in any one of the following fields or in some other field approved by the department.

- American studies
- Anthropology
- Comparative literature
- Drama
- Foreign languages and literatures
- History
- Linguistics
- Philosophy
- Political science
- Psychology
- Sociology
- Women's studies

Admission to Candidacy

For admission to candidacy for the doctorate in English, a student must either on three fields of study selected from the following (at least one of which shall be in English literature)

- Linguistics or philology
- Medieval literature (Old English literature and Middle English literature)
- 16th century to 1600 (to 1616 for Shakespeare)
- 17th century to 1660 (but including Aubrey, Bunyan, Milton, Traherne, and Vaughan)
- Restoration and 18th century
- 19th century
- 20th century

For admission to candidacy for the doctorate in English, a student must

A student may request permission of the director of graduate studies in English to write the examination when he or she has successfully completed 20 semester hours of course work after qualifying for the doctoral program.

Dissertation

The candidate must write a dissertation which contributes to literary or linguistic knowledge and exhibits original scholarship and the ability to conduct independent research. If a student selects the pedagogical option, the dissertation project should have direct relevance to classroom instruction. The candidate will present an oral defense of the dissertation before his or her dissertation defense committee and the Graduate Studies Committee, and an oral examination.

A student may request permission of the director of graduate studies in English to write the examination when he or she has successfully completed 20 semester hours of course work after qualifying for the doctoral program.

Dissertation

The candidate must write a dissertation which contributes to literary or linguistic knowledge and exhibits original scholarship and the ability to conduct independent research. If a student selects the pedagogical option, the dissertation project should have direct relevance to classroom instruction. The candidate will present an oral defense of the dissertation before his or her dissertation defense committee for its final approval. This committee shall consist of three or more members of the graduate faculty of the department especially qualified in the area of the dissertation, one of whom shall be the dissertation director; it may include members from related fields. The dean of the Graduate School or a dean's designee may also serve as an ex officio, nonvoting member of the dissertation defense committee.
Teacher Certification in English

The initial teacher certification program in English qualifies students for the Standard High School Certificate (6-12) issued by the state of Illinois. The state issues certificates upon the recommendation of the Department of English and Northern Illinois University. Admission to the program requires formal application by candidates and formal approval by the department. Students seeking an initial teaching certificate in English who have been admitted to any of the programs leading to a graduate degree in English should apply directly to the coordinator of teacher certification in English at the earliest possible date. Students-at-large and students seeking graduate degrees in other departments should request preliminary review forms from the coordinator for teacher certification, College of Liberal Arts and Sciences, at least one term before the term in which they wish to begin their program. Upon successful completion of the preliminary review, students in these categories may also apply for admission to the coordinator of teacher certification in English.

Admission Requirements

Admission to a graduate degree program in English or satisfactory completion of the preliminary review process.

Completion of 9 hours of graduate credit in English at NIU with a GPA of 3.00 or better, such credit to be approved by the coordinator. These hours will not, ordinarily, include courses used to meet certification requirements.

Satisfaction of the foreign language requirement for the B.A. in English at NIU, or the equivalent.

Application in writing to the coordinator.

Satisfactory interview with the coordinator.

Retention

Good academic standing.

GPA of 3.00 or better in all work required for certification taken at NIU.

A grade of B or better in all English courses required for certification.

A satisfactory review of progress toward the certificate with the coordinator each semester.

Courses in English Required for Certification (42)

At least 6 hours of American literature
At least 12 hours of English literature
At least 3 hours of linguistics
At least 3 hours of advanced composition or rhetoric
Three hours in teaching of composition
Three hours in methods of teaching English
Twelve hours in student teaching (ENGL 485)

Students who have not satisfied all requirements in English as part of their undergraduate programs may satisfy the remaining requirements, except for student teaching, with graduate-level courses. Upon the approval of the director of graduate studies in English, such courses may also be included in the program of studies for the graduate degree. Students seeking both a degree and certification should be careful to consult regularly with the director of graduate studies in English and with the coordinator of teacher certification about using courses to satisfy requirements in both programs.

Students are admitted to ENGL 485, Student Teaching (Secondary) in English, only after completing all other work required for the certificate and upon application to the coordinator.

The methods course must be taken in the semester immediately preceding student teaching.

Courses Required Outside the Department

General Education (47)

The state of Illinois requires extensive work in general education for certification. This work is taken, typically, at the undergraduate level and forms no part of a graduate degree program. Candidates for admission to certification should consult the coordinator for a list of courses approved by the department to make certain that they have satisfied these requirements and to remedy any deficiencies.

Clinical Experiences (100 clock hours)

The state of Illinois requires 100 clock hours of clinical experiences. This requirement may be satisfied in a variety of ways; it will be met, in most instances, with three consecutive enrollments in ILAS 300. Each enrollment in ILAS 300 involves 30 clock hours of clinical experience and awards one hour of undergraduate credit. ENGL 480 or ENGL 504, the methods course taken just prior to student teaching, includes 15 clock hours of clinical experience and completes the 100 hour requirement. Credit for clinical experiences may not be included in the program of studies for a graduate degree in English. Candidates should consult the coordinator of teacher certification in English about satisfying this requirement as soon as they have been admitted to the certification program.

Other State Certification Requirements (7)

Educational Psychology (2 hours)
History and/or Philosophy of Education (2 hours)
Psychology of Exceptional Children (3 hours)

These requirements may be met in a variety of ways, most readily by obtaining approval from the coordinator of teacher certification in English for appropriate courses taken in the College of Education. Because such courses are usually offered for 3 semester hours of credit, students may need to take at least 9 semester hours of credit. Courses which meet these requirements and which carry graduate credit may be included in graduate programs of study in English, with the approval of the director of graduate studies in English.

Passing the state of Illinois certification examination in English.

Course List

General

498. LITERARY TOPICS (2-3). The subject chosen for each section will be announced in advance. May be repeated to a maximum of 8 semester hours when topic varies. Half-semester course, 2 semester hours; semester course, 3 semester hours. Credit may not be applied toward a graduate degree in English.

501. BIBLIOGRAPHY AND METHODS OF RESEARCH (3). Introduction to the philosophy and methods of literary research. Required of all graduate students.

504. TOPICS IN MATERIALS FOR THE ENGLISH CLASSROOM (3). An analysis of new curriculum materials in English, with focus on language, literature, or composition. May be repeated to a maximum of 8 semester hours when topic varies.

507. TOPICS IN LITERATURE (3). Course devoted to the study of special topics and periods of literature. May be repeated to a maximum of 9 semester hours when topic varies.

509. CREATIVE WRITING (3). A workshop/pedagogy course in poetry or fiction for students who wish to further their knowledge of literature through practice of the art, and for those who intend to become practicing writers and critics. May be repeated to a maximum of 9 semester hours as the topic changes.

Courses Required Outside the Department

1Ordinarily to include work in American literature before 1885.
2Ordinarily to include Shakespeare.
3If at the graduate level, usually ENGL 514 or ENGL 516.
4If at the graduate level, usually ENGL 510.
5If at the graduate level, usually ENGL 500 or ENGL 600.
6If at the graduate level, usually ENGL 504.
590. LITERATURE AND FILM (3). The relationship between literature and film as narrative forms. The significance of literary modes such as romanticism and realism for film content and structure. Analysis of the adaptation of literary works to the medium of film.

596. PRACTICUM IN THE TEACHING OF COLLEGE ENGLISH (3). Supervised and evaluated experience in designing and conducting a course in English. May be repeated to a maximum of 15 semester hours; however, only 3 hours may be applied toward a graduate degree in English. PRQ: Consent of department.

597. ENGLISH INSTITUTE (1-6). Studies in selected topics of special interest to teachers of English. May be repeated to a maximum of 12 semester hours as the topic changes. May not be included in a program of courses for a graduate degree in English except with the approval of the Graduate Studies Committee. May be graded on a satisfactory/unsatisfactory basis. PRQ: Permission of director of graduate studies in English.

598. INDEPENDENT READING (1-3). Normally open only to students who have completed 30 semester hours in an M.A. program. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Permission of director of graduate studies in English.

599. MASTER'S THESIS (3). May be taken upon the appointment of a thesis director and the approval of a prospectus.

602. SEMINAR: TEXTUAL STUDIES (3). Advanced study of analytical bibliography, either descriptive or textual. May be repeated to a maximum of 9 semester hours when topic varies. PRQ: ENGL 501 or consent of department.

607. SEMINAR: TOPICS IN LITERATURE (3). Seminar devoted to advanced study of special topics and periods of literature. May be repeated to a maximum of 9 semester hours when topic varies.

699. DOCTORAL DISSERTATION (credit arranged). May be repeated to 30 semester hours.

Rhetoric and Literary Criticism

500. INTERNSHIP IN THE COLLEGE TEACHING OF ENGLISH (3). For teaching interns only. May be repeated for a maximum of 6 semester hours, all of which may be counted toward Option B program requirements for both master's and doctoral degrees, and for the certificate of advanced study. Only 3 semester hours of ENGL 500 may be applied toward other master's or doctoral program options in English.


503. TRADITIONS IN WRITTEN RHETORIC (3). Survey of major rhetoricians, theories, and movements that have contributed to those rhetorical traditions determining or influencing the production and analysis of written text.

505. LITERARY CRITICISM TO 1800 (3). An examination of major trends in criticism from Plato to the eve of Romanticism, with emphasis on authors whose contributions continue to affect critical thought.

506. LITERARY CRITICISM SINCE 1800 (3). A survey of Anglo-American and Continental literary theory and criticism of the 19th and 20th centuries, examining major texts as they relate to past work and especially as they contribute to contemporary developments.

510. RHETORIC OF PROSE COMPOSITION (3). An introduction to contemporary rhetorical theories and methods of written discourse and their pedagogical and practical applications. Required of students focusing on rhetoric.

526. TECHNICAL WRITING (3). Principles and strategies of planning, writing, and revising technical documents common in business and industry. Application in case studies and practical projects.

527. TECHNICAL EDITING (3). Principles and strategies of preparing technical documents for publication, including editing for content, organization, style, and layout. Application in case studies and practical projects.

528. INTERNSHIP IN TECHNICAL WRITING OR EDITING (3-12). Job-related experience involving primarily writing or editing and supervised cooperatively by the department's internship coordinator and by the sponsoring company or organization. May be repeated to a maximum of 12 semester hours; however, only 3 semester hours of credit may be applied toward a graduate degree in English. Open only to graduate students in English. PRQ: Consent of department internship coordinator.

529. TOPICS IN RHETORIC (3). Topics in rhetorical theory and analysis. May be repeated to a maximum of 6 semester hours when the topic changes. PRQ: Consent of department.

600. TOPICS IN THE TEACHING OF COLLEGE ENGLISH (3). May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

603. SEMINAR: RHETORICAL STUDIES (3). Seminar devoted to advanced study of special topics in the history of written rhetoric, theories of prose composition, writing practicum, rhetoric and stylistics, and applied discourse analysis. May be repeated to a maximum of 8 semester hours when topic varies.

Language

508. RESEARCH METHODS IN LINGUISTICS (3). An introduction to doing and interpreting research in linguistics. Discussion and application of theory in both qualitative and quantitative research.

511. HISTORY OF THE ENGLISH LANGUAGE (3). Linguistic analysis and description of the development of English from its earliest Anglo-Saxon stages to present-day British and American English.

512. OLD ENGLISH (3). Introduction to English at the earliest period of its history (i.e., before the Norman Conquest in 1066) with focus on the grammatical analysis of short prose works and the careful reading of several important poems.

513. MIDDLE ENGLISH (3). Analysis and description of the process by which Old English lost most of its Germanic inflections and gained an enormous Romance vocabulary in the wake of the Norman Conquest, with special attention to the persistence of dialectal variety as well as to the rise of a London standard.

514. INTRODUCTION TO LINGUISTICS (3). Survey of language and language study: elements of language, language change, language universals, first and second language acquisition, dialects, language and the brain, development of writing and contemporary writing systems, non-human communication, language change. Recommended as a preliminary course for students with little linguistic background.

515. DESCRIPTIVE ENGLISH LINGUISTICS (3). Survey of analytical techniques and methods of describing phonological, morphological, and syntactic systems of language.

516. GRAMMARS OF MODERN ENGLISH (3). Analysis and exemplification of three approaches (traditional, structural, transformational-generative) commonly used in teaching English to native users and to foreign learners.

517. PHONOLOGY (3). Introduction to the sound systems of language: phones, allophones, and the nature of phonological systems; segments and natural classes of sounds; allophonic and process rules.

518. MORPHOLOGY AND SYNTAX (3). Investigation of linguistic processes of word composition and sentence formation; and the nature of morphological and syntactic systems.


520. SEMANTICS (3). Survey of linguistic approaches to meaning, with focus on connotative and denotative word meanings, sentence and beyond-the-sentence meanings, and semantic change. Links between linguistic semantics and language pedagogy, pragmatics, and discourse analysis.

521. TOPICS IN LINGUISTICS (3). Focus on specific topics in theoretical or applied linguistics, usually not explored in depth in more general language/linguistics courses. May be repeated to a maximum of 6 hours when the topic changes.

522. THEORIES AND METHODS OF TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (3). A survey of theoretical principles, interdisciplinary approaches, methodology, and practical applications essential for teaching English as a second/foreign language or as a second dialect. Emphasis on linguistic, psychological, and social backgrounds of language learning in a bilingual or multilingual setting.
523. SECOND LANGUAGE ACQUISITION (3). Overview of the major theories and processes of second language acquisition including analyses of current empirical research in learner language and language-learning processes.

533. DISCOURSE ANALYSIS (3). Linguistic analysis of the functions and structures of oral language above the level of the sentence. Genres of oral texts investigated include conversation, exposition, and narrative.

534. LINGUISTICS AND LITERATURE (3). Exploration of the linguistic foundations of 20th-century literary theory and criticism, with particular focus on linguistic methods of analyzing literary style.

564. SEMINAR: ENGLISH LINGUISTICS (3). May be repeated to a maximum of 9 semester hours when topic varies.

535. MIDDLE ENGLISH LITERATURE (3).

536. BEOWULF (3).

537. CHAUCER (3).

538. 16TH CENTURY PROSE AND POETRY (3). English prose and poetry, 1485-1603.

539. ENGLISH DRAMA TO 1600 (3).

540. ENGLISH DRAMA: 1600-1660 (3).

541. SHAKESPEARE (3).

542. 17TH CENTURY PROSE AND POETRY (3).

543. SPENSER (3).

544. MILTON (3).

636. SEMINAR: MEDIEVAL LITERATURE (3). May be repeated to a maximum of 9 semester hours when topic varies.

637. SEMINAR: CHAUCER (3). May be repeated to a maximum of 9 semester hours when topic varies.

638. SEMINAR: 16TH CENTURY ENGLISH LITERATURE (3). May be repeated to a maximum of 9 semester hours when topic varies.

641. SEMINAR: SHAKESPEARE (3). May be repeated to a maximum of 9 semester hours when topic varies.

642. SEMINAR: 17TH CENTURY ENGLISH LITERATURE (3). May be repeated to a maximum of 9 semester hours when topic varies.

644. SEMINAR: MILTON (3). May be repeated to a maximum of 9 semester hours when topic varies.

556. RESTORATION AND EARLY 18TH CENTURY LITERATURE (3).

557. LATER 18TH CENTURY ENGLISH LITERATURE (3).

558. ENGLISH DRAMA: 1660-1800 (3).

559. 18TH CENTURY ENGLISH NOVEL (3).

560. ENGLISH ROMANTIC PERIOD (3).

561. VICTORIAN POETRY: 1830-1880 (3).

562. 19TH CENTURY ENGLISH PROSE (3).

563. 19TH CENTURY ENGLISH NOVEL (3).

564. ENGLISH LITERATURE: 1880-1920 (3).

565. ENGLISH LITERATURE SINCE 1900 (3).

566. 20TH CENTURY ENGLISH FICTION (3).

568. 20TH CENTURY ENGLISH FICTION (3).

565. SEMINAR: RESTORATION AND 18TH CENTURY ENGLISH LITERATURE (3). May be repeated to a maximum of 9 semester hours when topic varies.

662. SEMINAR: 19TH CENTURY ENGLISH LITERATURE (3). May be repeated to a maximum of 9 semester hours when topic varies.

664. SEMINAR: ENGLISH LITERATURE, 1880-1920 (3). May be repeated to a maximum of 9 semester hours when topic varies.

665. SEMINAR: 20TH CENTURY ENGLISH LITERATURE (3). May be repeated to a maximum of 9 semester hours when topic varies.

English Literature Before 1660

555. ENGLISH LITERATURE BEFORE 1660

American Literature

576. AMERICAN LITERATURE TO 1830 (3).

577. AMERICAN LITERATURE: 1830-1865 (3).

578. AMERICAN LITERATURE: 1865-1900 (3).

579. 19TH CENTURY AMERICAN NOVEL (3).

583. AMERICAN LITERATURE SINCE 1900 (3).

584. 20TH CENTURY AMERICAN POETRY (3).

585. 20TH CENTURY AMERICAN FICTION (3).

587. 20TH CENTURY AMERICAN DRAMA (3). Major American plays and playwrights of the 20th century, including such authors as O'Neill, Williams, Miller, Albee, Mamet, and Shepard.

594. AMERICAN LITERARY MULTICULTURALISM (3). Study of the contributions of diverse cultural groups to American literature.

595. BLACK AMERICAN WRITERS (3).

577. AMERICAN LITERATURE TO 1830 (3). May be repeated to a maximum of 9 semester hours when topic varies.

578. AMERICAN LITERATURE: 1830-1865 (3). May be repeated to a maximum of 9 semester hours when topic varies.

677. SEMINAR: AMERICAN LITERATURE TO 1830 (3). May be repeated to a maximum of 9 semester hours when topic varies.

683. SEMINAR: 20TH CENTURY AMERICAN LITERATURE (3). May be repeated to a maximum of 9 semester hours when topic varies.

English Literature After 1660

556. RESTORATION AND EARLY 18TH CENTURY LITERATURE (3).

557. LATER 18TH CENTURY ENGLISH LITERATURE (3).

558. ENGLISH DRAMA: 1660-1800 (3).

559. 18TH CENTURY ENGLISH NOVEL (3).

562. 19TH CENTURY ENGLISH PROSE (3).

564. ENGLISH LITERATURE: 1880-1920 (3).

565. ENGLISH LITERATURE SINCE 1900 (3).

566. 20TH CENTURY ENGLISH POETRY (3).

567. 20TH CENTURY BRITISH DRAMA (3). A survey of major plays and playwrights of the 20th century British theatre, including such writers as Shaw, Beckett, Pinter, Stoppard, and Ayckbourn.
The Department of Foreign Languages and Literatures (FL-) offers a graduate program leading to the M.A. degree. Students may pursue a specialization in French or Spanish with the following distribution of credit hours: linguistics (3), translation (6-9), culture and literature (12-15), elective (3), and practicum or thesis (3).

Students who wish to complete a program that includes a focus on a second language are required to take 12 additional semester hours in the second language (3-6 hours in translation and 6-9 hours in culture and literature) for a total of 42 semester hours of graduate credit, at least 21 hours of which must be taken in 500-level courses.

During their last semester of study, candidates are required to pass an oral comprehensive examination demonstrating a satisfactory level of communicative competence and the ability to integrate effectively a knowledge of language, literature, and culture. If a focus is taken in a second language, a second, similar examination must be passed for that language.

Specialization in French

Linguistics (3)
- FLAL 483, Applied Linguistics and the Romance Languages (3)
- FLFR 461, French Phonetics and Phonemics (3)
- FLST 583A, Research Seminar in Language and Linguistics: French (3)

Translation (6-9)
- FLFR 483, Theme et Version (3)
- FLFR 484, Advanced Translation (3)
- FLFR 485, Initiation to Consecutive Translation (3)
- FLST 584A, Research Seminar in Translation: French (3)

Culture and Literature (12-15)
- FLFR 431, 17th Century French Literature (3)
- FLFR 433, 18th Century French Literature (3)
- FLFR 435, 19th Century French Literature: Romanticism (3)
- FLFR 436, 19th Century French Literature: Realism and Naturalism (3)
- FLFR 437, 19th Century French Literature: Symbolism and the Modern Movement (3)
- FLFR 438, 20th Century French Literature (3)
- FLFR 441, Medieval French Literature (3)
- FLFR 443, French Literature of the Renaissance (3)
- FLFR 463, La France Contemporaine (3)
- FLST 540A, Research Seminar in Literature: French (3)
- FLST 561A, Research Seminar in Civilization and Culture: French (3)

Elective (3)
- With the consent of their graduate advisory committee, students may select other graduate-level courses which have direct application to the focus of the program or they may select other graduate-level courses which have indirect bearing on their program of study.
- ANTH 432, Historical and Comparative Linguistics (3)
- COMS 454, Transnational Communication and Media (3)
- ENGL 501, Bibliography and Methods of Research (3)
ENGL 502, Interpretation of Literary Texts (3)
ENGL 514, Introduction to Linguistics (3)
HIST 418, European Thought and Culture, 1870-Present (3)
Practicum/Thesis (3)
FLST 560, Practicum (3), OR
FLST 599, Master's Thesis (1-3)

Specialization in Spanish

Linguistics (3)
FLAL 483, Applied Linguistics and the Romance Languages (3)
FLSP 481, Phonetics and Phonemics (3)
FLSP 485, The Structure of Modern Spanish (3)
FLSP 486, Contrastive Grammatical Structures in Spanish and English (3)
FLSP 487, Spanish Dialects of the United States (3)
FLST 583D, Research Seminar in Language and Linguistics: Spanish (3)

Translation (6-9)
FLSP 483, Techniques of Spanish Translation (3)
FLSP 484, Advanced Spanish Translation (3)
FLST 584D, Research Seminar in Translation: Spanish (3)

Culture and Literature (12-15)
FLSP 431, Golden Age Poetry (3)
FLSP 432, Medieval Spanish Literature (3)
FLSP 433, Classical Spanish Drama (3)
FLSP 434, Cervantes: The Quixote (3)
FLSP 435, 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, Research Seminar in Literature: Spanish (3)
FLST 561D, Research Seminar in Civilization and Culture: Spanish (3)

Elective (3)
With the consent of their graduate advisory committee, students may select from the following language-related courses, or they may select other graduate-level courses which have a direct bearing on their program of study.

ANTH 432, Historical and Comparative Linguistics (3)
COMS 454, Transnational Communication and Media (3)
ENGL 501, Bibliography and Methods of Research (3)
ENGL 502, Interpretation of Literary Texts (3)
ENGL 514, Introduction to Linguistics (3)
HIST 418, European Thought and Culture, 1870-Present (3)

Practicum/Thesis (3)
FLST 590, Practicum (3), OR
FLST 599, Master's Thesis (1-3)

Course List

French (FLFR)

412. COMMERCIAL FRENCH (3). Practice in business and administrative correspondence in French. PRQ: FLFR 302 or consent of department. CRQ: MGBE 246 or consent of department.
431. 17TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 321 and FLFR 322, or consent of department.
433. 18TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 321 and FLFR 322, or consent of department.
435. 19TH CENTURY FRENCH LITERATURE: ROMANTICISM (3). PRQ: FLFR 321 and FLFR 322, or consent of department.
436. 19TH CENTURY FRENCH LITERATURE: REALISM AND NATURALISM (3). PRQ: FLFR 321 and FLFR 322, or consent of department.

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

Italian (FLIT)

411. SPECIAL TOPICS IN ITALIAN LITERATURE (3). The study of a major author, genre, theme, period, or literary movement. Topics for each offering will be announced in the Schedule of Classes. PRQ: FLIT 321 or consent of department.
431. 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 consent of department.

Spanish (FLSP)

414. SPANISH CORRESPONDENCE (3). Practice in contemporary business, administrative, and personal correspondence in Spanish. PRQ: FLSP 411 or consent of department. CRQ: MGBE 246 or consent of department.
431. SPANISH GOLDEN AGE POETRY (3). Study and analysis of the major poetic works of the Spanish 16th and 17th centuries. Poets treated will be Spanish Petrarchists of the Renaissance, "Mannerist," and Baroque periods, including some of the greatest poets of all Spanish literature.
432. MEDIEVAL SPANISH LITERATURE (3). Through the 15th century. PRQ: FLSP 321 or consent of department.
433. CLASSICAL SPANISH DRAMA (3). PRQ: FLSP 321 or consent of department.
434. CERVANTES: THE QUIXOTE (3). PRQ: FLSP 321 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).
436. SPANISH ROMANTICISM AND REALISM (3). PRQ: FLSP 321 or consent of department.
437. THE GENERATION OF 1898 (3). PRQ: FLSP 321 or consent of department.
438. CONTEMPORARY SPANISH LITERATURE (3). PRQ: FLSP 321 or consent of department.
452. LITERATURE OF THE CARIBBEAN (3). A general treatment of the literature of Colombia, Venezuela, Central America, and the Spanish-speaking West Indies, with emphasis on the 19th and 20th centuries. PRQ: FLSP 322 or consent of department.

453. LITERATURE OF URUGUAY, ARGENTINA, AND CHILE (3). A general treatment of the regional literature of the River Plate republics and Chile, with emphasis on the period since 1914. PRQ: FLSP 322 or consent of department.

454. MEXICAN LITERATURE (3). A general treatment of Mexican literature, with emphasis on the 20th century. PRQ: FLSP 322 or consent of department.

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

461. HISPANIC CIVILIZATIONS (3). The development of the Spanish pattern of civilization from pre-Roman times to the present. PRQ: FLSP 311 or consent of department.

462. SPANISH-AMERICAN CIVILIZATION (3). The evolution of the Spanish-American pattern of civilization from the pre-Hispanic period to the present. PRQ: FLSP 311 or consent of department.

461. HISPANIC CIVILIZATIONS (3). The development of the Spanish pattern of civilization from pre-Roman times to the present. PRQ: FLSP 311 or consent of department.

462. SPANISH-AMERICAN CIVILIZATION (3). The evolution of the Spanish-American pattern of civilization from the pre-Hispanic period to the present. PRQ: FLSP 311 or consent of department.

462. SPANISH-AMERICAN CIVILIZATION (3). The evolution of the Spanish-American pattern of civilization from the pre-Hispanic period to the present. PRQ: FLSP 311 or consent of department.

481. SPANISH PHONETICS AND PHONEMICS (3). PRQ: FLSP 411 or consent of department.

482. ADVANCED SPANISH TRANSLATION (3). Intensive training in accurate and idiomatic translation of business, administrative, and technical texts from Spanish to English and Spanish. May be repeated to a maximum of 9 semester hours. PRQ: FLSP 493 or consent of department.

483. TECHNIQUES OF SPANISH TRANSLATION (3). Development of skill and techniques of translation from Spanish to English and English to Spanish. May be repeated to a maximum of 9 semester hours. PRQ: FLSP 411 or consent of department.

484. HISTORY OF THE GERMAN LANGUAGE (3). A survey of the structure of Modern German and the use of contemporary linguistic methods to analyze and contrast its major structures and their functions. PRQ: FLGE 302 or consent of department.

485. MODERN GERMAN LITERATURE: 1900-1945 (3). Literary trends from 1890 to 1945, including impressionism, neo-romanticism, expressionism, the new realism of the Weimar Republic, the Third Reich, the inner Emigration, and the Other Germany in exile. Includes representative writers such as Wedekind, Schnitzler, Hofmannsthal, Rilke, Thomas Mann, Kafka, Hesse, and Brecht. PRQ: FLGE 321 and FLGE 322, or consent of department.

483. DIRECTED READINGS IN CLASSICAL LANGUAGES (1-3). Independent study of a classical author under the direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: FLRU 301 or consent of department.

484. HISTORY OF THE GERMAN LANGUAGE (3). A survey of the German language from its origins to the present, with emphasis on the developments since the reunification of 1990. Analysis of essential texts and the lives of representative Germans. Lectures, discussions, films. Taught in German. PRQ: FLGE 321 and FLGE 322, or consent of department.

485. METHOD OF MODERN RUSSIAN (3). A survey of modern Russian and the use of contemporary linguistic methods to analyze and contrast its major structures and their functions. PRQ: FLGE 302 or consent of department.

486. CONTRASTIVE GRAMMATICAL STRUCTURES IN SPANISH AND ENGLISH (3). Provides the student with a knowledge of the basic structural differences between Spanish and English. Taught in both languages to demonstrate fundamental interrelationships between the two languages. Emphasis also on sensitivity to language interference and other problems of language acquisition. PRQ: FLSP 411 or consent of department.

487. SPANISH DIALECTS OF THE U.S. (3). Provides the student with a knowledge of the variations that exist within the Spanish language as spoken in the United States. Oral participation is stressed. PRQ: FLSP 411 or consent of department.

Portuguese (FLPO)

461. BRAZILIAN CIVILIZATION (3). The contributions of the African and Indian to the history and literature of Brazil. Classes conducted in English with English and Portuguese bibliography.

German (FLGE)

411. MODERN GERMAN (3). Current usages in spoken and written German with emphasis on contemporary vocabulary, idiomatic expressions, and syntax. In German. PRQ: FLGE 311 or consent of department.

412. BUSINESS GERMAN I (3). Techniques of spoken and written communication necessary in the business world. Discussion of basic features of the export-oriented German economy. PRQ: FLGE 411 or consent of department.

432. ENLIGHTENMENT, THROUGH WEIMAR CLASSICISM (3). Literary, philosophical, and political experience of Germany in the 18th century as reflected in the works of Lessing, Herder, Wieland, Goethe, Schiller, and others. PRQ: FLGE 321, FLGE 322, or consent of department.

433. GERMAN ROMANTICISM (3). Background, theory, and major texts of German Romanticism. PRQ: FLGE 321 and FLGE 322, or consent of department.

434. GERMAN REALISM AND NATURALISM (3). Realism and naturalism in 19th century Germany as reflected in the prose, poetry, and drama of Stifter, Keller, Hebbel, Storm, Fontane, Hauptmann, and others. PRQ: FLGE 321 and FLGE 322, or consent of department.

435. MODERN GERMAN LITERATURE: 1900-1945 (3). Literary trends from 1890 to 1945, including impressionism, neo-romanticism, expressionism, the new realism of the Weimar Republic, the Third Reich, the inner Emigration, and the Other Germany in exile. Includes representative writers such as Wedekind, Schnitzler, Hofmannsthal, Rilke, Thomas Mann, Kafka, Hesse, and Brecht. PRQ: FLGE 321 and FLGE 322, or consent of department.

437. CONTEMPORARY GERMAN LITERATURE (3). German literature from 1945 to the present, including the postwar period, the East-West division of the Cold War, and the conflicts since the reunification of 1990, but also the separate developments in Austria and Switzerland. Texts by such representative writers as H. Boll, G. Grass, C. Wolf, and others. PRQ: FLGE 321 and FLGE 322, or consent of department.

Russian (FLRU)

431. RUSSIAN ROMANTICISM (3). Readings, lectures, and discussion: works by Pushkin, Lermontov, Gogol, and their contemporaries. PRQ: FLRU 301 and FLRU 321 or consent of department.

432. RUSSIAN REALISM (3). Readings, lectures, and discussion: works by Turgenev, Dostoevsky, Tolstoy, and their contemporaries. PRQ: FLRU 301 and FLRU 321 or consent of department.

433. RUSSIAN LITERATURE: 1881-1920 (3). Readings, lectures, and discussion: works by Chekhov, Gorky, Bunin, Bely, Mayakovsky, Blok, and their contemporaries; poetry of the modernist period. PRQ: FLRU 301 and FLRU 321 or consent of department.

434. SOVIET LITERATURE (3). Readings, lectures, and discussion: works by Zamyatin, Babel, Leonov, Sholokhov, Pasternak, Solzhenitsyn, and others. PRQ: FLRU 301 and FLRU 321 or consent of department.

461. CONTEMPORARY RUSSIAN LITERATURE (3). A survey of the contemporary Russian culture as used in the USSR. Emphasis on development of reading and writing skills and translation techniques with recent material from science, economics, politics, and the arts. May be repeated to a maximum of 9 semester hours. PRQ: FLRU 301 or consent of department.

480. MODERN RUSSIAN (3). Advanced study of contemporary Russian as used in the USSR. Emphasis on development of reading and writing skills and translation techniques with recent material from science, economics, politics, and the arts. May be repeated to a maximum of 9 semester hours. PRQ: FLRU 301 or consent of department.

Classical Languages (FLCL)

FLCL 483. DIRECTED READINGS IN CLASSICAL LANGUAGES (1-3). Independent study of a classical author under the direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Two years of college Latin or Greek or consent of department.
Asian Language (FLIN)

FLIN 421. INTRODUCTION TO INDONESIAN LITERATURE (3). A survey of the development of Indonesian literature. Selected readings in regional languages in translation using traditional and contemporary Indonesian literature. PRQ: FLIN 204 or consent of department.

General (FLAL, FLIS, FLMT, FLST)

FLAL 483. APPLIED LINGUISTICS AND THE ROMANCE LANGUAGES (3). A survey of the principles of linguistic theory as they apply to the teaching of the major romance languages. Emphasis on taxonomic and transformational linguistics. PRQ: Completion of the second year of a Romance language or consent of department.

FLIS 481. INDEPENDENT STUDY IN A FOREIGN LANGUAGE (1-6). Independent research on a cultural, linguistic, or literary topic. Student must present a detailed outline of proposed research before permit is granted. May be repeated to a maximum of 6 semester hours. PRQ: Three 400-level courses in the language or consent of department.

FLMT 591. METHODOLOGIES FOR THE TEACHING OF FOREIGN LANGUAGES AT THE UNIVERSITY LEVEL (2). Study and practice of current theories, methodologies, and instructional materials used in the teaching of modern foreign languages at the university level. Emphasis on practical application and incorporation of techniques into classroom instruction. Required course for new teaching assistants in the Department of Foreign Languages and Literatures. S/U grading.

FLST 481. SPECIAL TOPICS IN LITERATURE I (3). The study of a major author, genre, theme, period, or literary movement. The topics for each section will be announced in the Schedule of Classes. May be repeated for credit to a maximum of 6 semester hours as topic changes. PRQ: Consent of department.

FLST 482. SPECIAL TOPICS IN LITERATURE II (3). The study of a major author, genre, theme, period, or literary movement. Topics announced in the Schedule of Classes. May be repeated to a maximum of 6 semester hours as topic changes. PRQ: Consent of department.

FLST 540. RESEARCH SEMINAR IN LITERATURE (3).
A. French
B. German
C. Russian
D. Spanish
The study of special subjects and periods of literature. May be repeated to a maximum of 15 semester hours as the subject and/or period varies. PRQ: Consent of department.

FLST 561. RESEARCH SEMINAR IN CIVILIZATION AND CULTURE (3).
A. French
B. German
C. Russian
D. Spanish
Selected subjects in civilization and culture of the language area indicated. Specific subjects will be announced in the Schedule of Classes. Any one language area may be repeated to a maximum of 12 semester hours when the subject varies. PRQ: Consent of department.

FLST 583. RESEARCH SEMINAR IN LANGUAGES AND LINGUISTICS (3).
A. French
B. German
C. Russian
D. Spanish
Focus on specific subjects in linguistics as related to an individual language area. May be repeated to a maximum of 9 semester hours as the subject changes. PRQ: Consent of department.

FLST 584. RESEARCH SEMINAR IN TRANSLATION (3).
A. French
B. German
C. Russian
D. Spanish
Graduate training in translation with a focus on specific subjects related to the various foreign languages. May be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

FLST 590. PRACTICUM (3). Professional experience related to the work environment, utilizing foreign language translation and/or communication skills. Normally only available to students who have no prior foreign-language-related work experience. PRQ: Consent of department.

FLST 599. MASTER'S THESIS (1-3). May be taken upon the appointment of a thesis director and the approval of a prospectus. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.
Department of Geography (GEOG, MET)

Chair: John M. Harlin

Graduate Faculty
Kenneth L. Bowden, assistant professor, M.S.Ed., Northern Illinois University
David Charignon, assistant professor, Ph.D., Colorado State University
C. Daniel Dillman, professor, Ph.D., University of Michigan
Richard Greene, assistant professor, Ph.D., University of Minnesota
John M. Harlin, professor, Ph.D., University of Iowa
Andrew J. Krmenc, associate professor, Ph.D., Indiana University
Jie Song, assistant professor, Ph.D., University of Delaware
Charles E. Trott, professor, Ph.D., Ohio State University

The Department of Geography offers a graduate program leading to the M.S. degree.

Master of Science in Geography

All new students who are admitted to a major in geography leading to the M.S. degree are required to consult with the coordinator of the department's Graduate Studies Committee before registering for courses. The coordinator will assist students in identifying an appropriate regular adviser who will form a committee to arrange a program of study. A student must choose either a thesis or a non-thesis option subject to the consent of the adviser. Students must have the written approval of their adviser to register for geography courses each semester and must meet with their committee and with the Graduate Studies Committee each academic year to discuss progress made toward the degree. Students who have not already met the requirements for an undergraduate degree in either geography or meteorology at NIU must satisfy course deficiencies during their first year in the department. Such course hours do not carry graduate credit toward the degree unless approved by the Graduate Studies Committee or adviser.

Requirements
GEOG 500, Geography Seminar (1/2) (must be taken each semester; hours do not count toward required hours for graduation)
GEOG 504, Concepts in Human Geography (3)
GEOG 505, Concepts in Physical Geography (3)
GEOG 563, Geographic Research Procedures (3)
Satisfactory performance on a comprehensive written examination

One of the following
Satisfactory performance on a reading-knowledge examination in an appropriate modern foreign language
GEOG 561, Advanced Quantitative Methods for Geographic Research (3)
GEOG 565, Advanced Field Methods (3-6) (only for individuals teaching or planning to teach at the elementary or secondary levels)

Satisfactory completion of the requirements for either the thesis or non-thesis option.

Thesis Option
The thesis option consists of a minimum of 30 semester hours, including at least 24 semester hours of course work and a thesis. Students are required to present findings of the thesis at the Geography Seminar (GEOG 500) and to present one paper or poster at a state, regional, or national professional meeting. Complete instructions for writing and submitting the thesis are in the department's "Graduate Student Handbook" (consult adviser).

Non-Thesis Option
The non-thesis option consists of a minimum of 36 semester hours. Students must submit two major research papers. The first paper must be submitted and accepted prior to completion of 24 semester hours. One paper must be completed under GEOG 572. Findings of one non-thesis paper will be presented at the Geography Seminar (GEOG 500). Complete instructions for writing and submitting the research papers are available in the department's "Graduate Student Handbook."

Course List

Geography (GEOG)

402. PEDOLOGY (4). Soil genesis, distribution, and classification. Emphasis on soils of the U.S. Field trips are required. PRQ: GEOG 302 or consent of department.


413, FOREST ECOLOGY AND MANAGEMENT (3). Forest tree identification and environmental requirements. Problems of forest management and assessment of conflicting social and economic demands. Field trips involving extra fees are required. PRQ: GEOG 253 and BIOS 103 or BIOS 104, or consent of department.

422. EDAPHOLOGY (4). Crosslisted as BIOS 422X. Chemical and physical properties of soils affecting agricultural and forest productivity, segregation of natural plant communities, and ornamental plants. Field trips are required. PRQ: BIOS 103 or BIOS 104 and GEOG 302, or consent of department.

430. POPULATION GEOGRAPHY (3). Basic demographic measures and data sources for the study of population size, distribution, composition, and dynamics. Relationships between population and geographic, economic, resource, social, and policy issues. Both conceptual and empirical approaches will be discussed. PRQ: 3 semester hours in geography or sociology or consent of department.

442X. GEOMORPHOLOGY (3). GEOL 442. Systematic study of the 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 101A, GEOL 105, GEOL 120, or GEOL 120A, and consent of department.

451. POLITICAL GEOGRAPHY (3). The study of political phenomena in areal context. Emphasizes temporal and spatial attributes of the State. Core areas and capitals, boundaries, administration of territory, Geopolitics, power, multinational organizations, and modern theories about States. Geographic concepts applied to in-depth analysis of selected conflict regions. PRQ: Consent of department.

453. ENVIRONMENTAL RESOURCE PLANNING (3). Problems and alternative strategies in environmental management. Project evaluation of alternatives; feasibility studies; benefit/cost analysis, environmental impact statements. PRQ: GEOG 253 or consent of department.

455. LAND USE PLANNING (3). Types and patterns of land use: problems, goals, alternatives, and policy. PRQ: GEOG 304 or GEOG 362, 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 356 and GEOG 359, or consent of department.

461. APPLIED STATISTICS IN GEOGRAPHIC RESEARCH (3). Application of descriptive and inferential statistics in geographic research: the general linear model, spatial statistics, computer analysis, and research design and presentation. PRQ: STAT 301 and consent of department.

462. RETAIL LOCATION (3). Locational analysis of marketing activities and consumer behavior. Review of census data bases and models used in the analysis of consumer travel and shopping patterns, trade regions, market hierarchies, facility sitting, and market demand forecasting. PRQ: GEOG 204 and GEOG 361 or ECON 2607 or MKTG 310, and consent of department.

463. URBAN GEOGRAPHY (3). Examination of the internal patterns and dynamics of urban areas. Spatial, economic, political, social, and behavioral approaches to the study of cities. Major focus is on U.S. cities. PRQ: GEOG 362 or consent of department.

464. INDUSTRIAL LOCATION THEORY (3). A comprehensive study of traditional and contemporary theories of industrial locations, and the changing structure of industrial systems in regional, national, and global economies. PRQ: GEOG 361 and either GEOG 204 or ECON 2607, and consent of department.

467. WORKSHOP IN APPLIED CARTOGRAPHY (1-3). Problems and techniques of map prototype development. Projects vary but include creation of customized maps and design of image maps. Directed individual study. May be repeated to a maximum of 6 semester hours. PRQ: GEOG 356 or consent of department.

469. EDUCATION METHODS AND MATERIALS IN GEOGRAPHY (3). Strategies of presenting geographic concepts. Evaluation of techniques and materials. PRQ: EPSY 405 or EPSY 406, or consent of department.

492. HYDROLOGY (3). Crosslisted as GEOL 492X. Quantitative examination of the interaction of precipitation, stream discharge, and groundwater flow. Utilization of water resources. PRQ: GEOG 101A or GEOG 120, and MATH 210 or MATH 229, and consent of department.

493. COMPUTER METHODS AND MODELING (3). Algorithms for programming of geographic research problems; computer graphics; simulation techniques; regional modeling. PRQ: CSCI 210 or CSCI 230, and GEOG 461 or MET 421, or consent of department.

494. WATER RESOURCES MANAGEMENT AND POLICY (3). Problems of water use and allocation; evaluation of policy alternatives. PRQ: GEOG 101A, GEOG 303, and consent of department.

495X. TEACHING OF PHYSICAL SCIENCES (3). PHYS 495. Preparation for certification in grades 6-12 in one or more of the fields of physical science: physics, chemistry, earth science, and general science. Examination and analysis of modern curricula; classroom and laboratory organization; microteaching and observation of teaching; lesson planning; multicultural education; teaching science to the exceptional child; reading and the teaching of science; methods of evaluation. Includes 15 clock hours of clinical experience. PRQ: Consent of department.

496X. MATERIALS AND PROBLEMS OF HIGH SCHOOL INSTRUCTION IN THE SOCIAL SCIENCES (3). HIST 496. Must be taken by students seeking certification in a social science before student teaching. Includes 15 clock hours of clinical experience, attention to the teaching of exceptional students, planning for multicultural learning situations, and techniques of teaching in the social sciences. PRQ: Consent of department.

498. SEMINAR IN CURRENT PROBLEMS (1-3). A. Natural Environmental Systems B. Meteorology/Climatology C. Environmental Management D. Urban/Economic Geography E. Area Studies. J. Hydrology K. Soil Science M. Methodology and Techniques Selected topics in the various subfields of geography. May be repeated to a maximum of 6 semester hours as the topic changes. PRQ: Consent of department.

500. GEOGRAPHY SEMINAR (1/2). Required of graduate students each semester in residence except summer session. May be repeated to a maximum of 3 semester hours. Hours do not count toward required hours for graduation.

502. INTERNSHIP (1-6). A. Natural Environmental Systems B. Meteorology/Climatology C. Urban/Economic Geography D. Area Studies E. Cartography J. Remote Sensing Work as an intern in an off-campus agency or firm. The students will complete intern tasks as assigned, do readings, and prepare a paper under the supervision of a faculty member. May be repeated to a maximum of 12 semester hours; only 3 semester hours may be applied to the degree program. S/U grading. PRQ: Consent of department.

504. CONCEPTS IN HUMAN GEOGRAPHY (3). Exploration of the origins, development, and applications of the fundamental concepts in human geography, and the role and function of human geography in its current place within the four traditions of geography. PRQ: Consent of department.

505. CONCEPTS IN PHYSICAL GEOGRAPHY (3). History and development of thought in physical geography. Examination of human intervention with physical systems in light of global climate change and world food, population, and development.

508. GEOGRAPHY INSTITUTE FOR TEACHERS (1-8). Development of substantive knowledge of systematic or regional geography, understanding of geographical methodology, and exploration of means of articulating advanced work into field and classroom instruction. May be repeated to a maximum of 8 semester hours. PRQ: Consent of institute director.

551. GEOPOLITICAL PERSPECTIVES (3). Application of political geographic ideas, concepts, and perspectives to a range of current global issues, e.g., territorial nationalism, conflict over natural resources, population growth, and migration. PRQ: Consent of department.

558. READINGS IN GEOGRAPHY (1-3). Directed readings in those phases of geographic literature needed by the student to strengthen background knowledge. May be repeated to a maximum of 6 semester hours.

559. GEOGRAPHIC ASPECTS OF REGIONAL PLANNING AND DEVELOPMENT (3). A geographical analysis of functional and comprehensive planning at various levels. Case studies, with emphasis on the U.S. and the relationships between planning and economic development.

560. ADVANCED SPATIAL ANALYSIS (3). Statistical and analytical procedures for the analysis of spatial data. Includes descriptive spatial statistics; point, line, and area pattern analysis; multivariate spatial patterns; spatial autocorrelation; spatial process models and kriging; limitations of asymptotic-theory hypothesis test procedures and introduction to randomization tests. Emphasis on the development and application of operational spatial analysis routines for use in GIS, applied, and basic spatial research. PRQ: GEOG 461 or consent of department.

561. ADVANCED QUANTITATIVE METHODS FOR GEOGRAPHIC RESEARCH (3). Introduction to multivariate data analysis: matrix algebra, MANOVA, discriminant functions, principal components, and other procedures in geographic research. PRQ: GEOG 461 or consent of department.

563. GEOGRAPHIC RESEARCH PROCEDURES (3). Geography in the sciences; logical inquiry; paradigms and models; geographic research strategies.

565. ADVANCED FIELD METHODS (3-6). Field investigation of spatial processes and patterns. Research design, sampling methods, and mapping techniques. Choice of area and topics dependent upon needs and interests of the student. May be repeated to a total of 6 semester hours. PRQ: Consent of department.

568. HISTORY OF GEOGRAPHIC THOUGHT (3). The evolution of concepts pertaining to the nature, scope, and methodology of geography since classical times; emphasis on the modern period. PRQ: Consent of department.

570. ADVANCED CLIMATOLOGY (3). Physical processes associated with the global energy balance, the hydrologic cycle, and the atmosphere’s general circulation, and their linkage to the climate system. Climate controls to understand climates of various spatial scales. Past, present, and future climate variability and change. Applications to climate-sensitive environmental systems. PRQ: Consent of department.

571. INDEPENDENT RESEARCH (1-3). A. Natural Environmental Systems B. Meteorology/Climatology C. Urban/Economic Geography
D. Area Studies
  J. Cartography/Remote Sensing
  Independent research under the supervision of adviser. May be repeated to a maximum of 6 semester hours.

572. MASTER'S RESEARCH PAPER (1-3). Individual investigation of special problems in the field of geography under supervision of one or more staff members. May be repeated to a maximum of 6 semester hours.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours.

600. SEMINAR IN SYSTEMATIC GEOGRAPHY (1-3).
  A. Landforms/Soils
  B. Meteorology/Climatology
  C. Natural Resources
  D. Economic Geography
  E. Cultural Geography
  J. Urban Geography
  K. Political Geography
  Lectures, discussions, and reports on topics of special interest in a particular field of systematic geography. One to 3 semester hours as scheduled. May be repeated in one or more fields of geography to a maximum of 6 semester hours in any field of systematic geography. PRQ: Consent of department.

601. SEMINAR IN REGIONAL GEOGRAPHY (1-9). Lectures, discussions, and reports on topics of special interest in a particular field of regional geography. One to 9 semester hours as scheduled; course may be repeated to a maximum of 9 semester hours in any field of regional geography as the topic changes. PRQ: Consent of department.

602. SEMINAR IN GEOGRAPHIC METHODOLOGY AND TECHNIQUES (1-9). Lectures, discussions, and reports on topics of special interest in geographic methods and techniques. May be repeated to a total of 9 semester hours, if the topic changes.

Meteorology (MET)

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, or consent of department. CRQ: CSCI 230 or CSCI 240, or consent of department.

411. WEATHER DYNAMICS II (4). Waves in the atmosphere, quasi-geostrophic flow theory, introduction to numerical weather prediction and dynamic instability theory. Three hours of lecture and two hours of laboratory. PRQ: MET 410 or consent of department.

430. MICROMETEOROLOGY (3). Study of physical processes in the boundary layer: laminar flow, turbulence, momentum and heat flux, diffusion, katabatic and anabatic flow. PRQ: MET 410 and CSCI 230 or CSCI 240, or consent of department. CRQ: MET 410.

431. APPLICATIONS IN CLIMATOLOGY (3). Application of climatological theory and personal computers to develop climate relationship-decision models for use in agriculture, water resources, utilities, construction, transportation, and recreation. PRQ: GEOG 370 or consent of department.

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. PRQ: MATH 336 and MET 300, or consent of department.

540. CLIMATE DYNAMICS I (3). Global scale tropospheric convection and wave processes on time scales from the Brunt-Vaisalla frequency to multiples of the Milankovitch cycle. Deterministic chaos and climate variability. Sensitivity of the troposphere to solar forcing, volcanism, orbital changes, anthropogenic effects, and atmosphere-ocean coupling. PRQ: MET 411 or consent of department. CRQ: MATH 336 or consent of department.

541. CLIMATE DYNAMICS II (3). A detailed systematic investigation into the macroscale dynamics of the climate system as a continuation of MET 540. Additional topics include the Lorenz equations, energy balance models, Milankovitch theory of climate, Golitsyn similarity theory of planetary atmospheric circulation, and the development of a three-dimensional tropospheric general circulation model. PRQ: MET 540 or consent of department.
Department of Geology (GEOL)

Chair: Jonathan H. Berg

Graduate Faculty
Jonathan H. Berg, professor, Distinguished Research Professor, Ph.D., University of Massachusetts
Colin J. Booth, assistant chair, associate professor, Ph.D., Pennsylvania State University
Elizabeth A. Burton, associate professor, Ph.D., Washington University
Phillip J. Carpenter, associate professor, Ph.D., New Mexico Institute of Mining and Technology
C. Patrick Ervin, associate professor, Ph.D., University of Wisconsin
Mark P. Fischer, assistant professor, Ph.D., Pennsylvania State University
Ruth I. Kalamarides, associate professor, Ph.D., University of Massachusetts
Hsin Yi Ling, professor, Distinguished Research Professor, Ph.D., Washington University
Paul Loubere, professor, Ph.D., Oregon State University
Carla W. Montgomery, associate professor, Ph.D., Massachusetts Institute of Technology
Jay A. Stravers, associate professor, Ph.D., University of Colorado

The Department of Geology offers graduate programs leading to the M.S. and Ph.D. degrees.

Because the number of places in the graduate program in geology is limited, the graduate committee may wait to make admission decisions until the majority of applications for a given semester are complete. In the case of an applicant presenting superior credentials for admission, however, a decision may be made immediately upon receipt of the completed application.

Master of Science in Geology

The M.S. degree prepares one for professional work in geology, or for further work leading to a doctorate. It may also be valuable to teachers of earth science in secondary schools and community colleges. Teachers and prospective teachers, if not already certified, will be expected to obtain the necessary requisites for certification in Illinois.

Students are normally expected to meet the geology, chemistry, physics, and mathematics requirements for the B.S. in geology at NIU. However, students whose undergraduate major was in a science other than geology are encouraged to apply. Such students will be expected to complete a core sequence of undergraduate geology courses in mineralogy, petrology, stratigraphy, structural geology, and the summer field camp.

Requirements
A minimum of 30 semester hours of graduate credit taken under either the thesis or non-thesis option is required. This will normally include at least 24 semester hours in geology.

The student must pass a comprehensive examination, which is to be taken in the semester following that in which the student has completed at least 12 semester hours of graduate course work. In consultation with their adviser, practicing or prospective teachers should construct a broad subject-matter course plan involving astronomy, biology, chemistry, mathematics, meteorology, or physics.

Thesis Option
At least 24 semester hours plus a thesis. Ordinarily, no more than 3 semester hours of independent study courses (GEOL 570 and/or GEOL 670) may be included in the minimum 24 non-thesis semester hours. Additional independent-study hours may be counted toward this total only with the approval of the departmental graduate committee. Each student is required to make a public presentation of the results of the thesis research through a departmental colloquium as well as a defense of the thesis.

Non-Thesis Option
At least 30 semester hours. During the first semester in the program, a student must petition the department's graduate committee to obtain permission to pursue this option.

Doctor of Philosophy in Geology

Any student who has earned a baccalaureate or master's degree in geology, biology, chemistry, engineering, mathematics, or physics from an accredited college or university is eligible to apply for admission. Every candidate for the Ph.D. must complete the requirements specified below.

Course Requirements
Ph.D. students in geology must normally complete a minimum of 90 semester hours as part of the degree program. In computing this total, a maximum of 30 semester hours may be included from the M.S. or equivalent program, provided they are consistent with the student's Ph.D. program objectives. At least 24 semester hours must be taken in approved courses in the student's field of study. A maximum of 39 semester hours may be counted for Ph.D. dissertation research and writing (GEOL 699). The remaining hours must be selected from electives and an internship program, with the consent of the adviser.

The complete doctoral program is arranged as follows.

1. Field of study 24-30 semester hours
2. Electives 21-30 semester hours
3. Internship 0-9 semester hours
4. Dissertation (GEOL 699) 30-39 semester hours

The student should expect to take a significant portion of the elective course work in allied science departments, particularly chemistry, mathematics, and physics, as is appropriate to round out the doctoral program. Entering students with particularly sound preparation in geology may, with approval, substitute grade courses in other departments for required geology courses. Conversely, non-geology majors entering the doctoral program
will need to strengthen their background in fundamental geologic principles.

The student entering the Ph.D. program with a B.S. or B.A. degree who does not elect to undertake a master's thesis must take the non-thesis option M.S. examination in the semester in which he or she will have completed 30 semester hours of graduate study. The student must complete this examination satisfactorily in order to continue in the Ph.D. program.

**Candidacy Examination**

No later than the semester in which 30 semester hours of graduate study beyond the M.S. (or beyond satisfactory performance on the non-thesis M.S. examination—see above) are completed, but at least 8 months before the dissertation defense, the student must successfully complete a candidacy examination consisting of both written and oral portions. Details concerning this examination may be obtained from the Department of Geology.

**Language Requirement**

The language requirement may be satisfied by demonstrating average proficiency in German, French, Spanish, or Russian. With the approval of the department's Graduate Committee, an alternative language may be substituted.

**Internship**

Before or during tenure in the Ph.D. program, the student must intern for a minimum period of one semester with industry, a public or private research organization, or a government agency. The internship position and arrangements must be approved by the department. The internship must be in a geoscience setting or organization and appropriate to the candidate's program. This requirement may be waived in special cases where a degree candidate has previous practical experience in the subject matter.

**Dissertation**

The student must complete an approved research project and prepare a dissertation. It must be a substantial contribution to knowledge, in which the student exhibits original scholarship and the ability to conduct independent research. An oral defense of the student's work and dissertation is required; this will be held before the university community and under the supervision of the student's doctoral committee, in accordance with Graduate School regulations.

**Teacher Certification**

Students wishing to receive initial certification or endorsement in general science (geology area) or physical science (geology area) to teach in grades 6-12 (Standard High School Certificate) must schedule an interview with the geology certification coordinator to formulate a specific plan of study and complete a written "Intention to Pursue Certification" form. Consulting the coordinator before registering for the initial term will facilitate expeditious completion of the program.

The specific plan of study for meeting certification or endorsement requirements must be approved by the geology certification coordinator. Students must consult with the coordinator each semester before registering and are responsible for timely submission of the several required applications and permits.

Students who are also pursuing an advanced degree in geology should consult their academic adviser and the certification coordinator before registering for their first term at NIU. Students seeking teaching certification or endorsement without enrollment in the degree program should, prior to their first registration, consult the geology certification coordinator. Students wishing to obtain initial certification as postgraduates should consult the Undergraduate Catalog and the geology certification coordinator.

**Course List**

Students-at-large may enroll in graduate courses in geology only by consenting 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 analyses are emphasized in the laboratory. PRQ: GEOL 300 or consent of the department.

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 301 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: GEOL 312 and CHEM 211, 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 and GEOL 300, or consent of department.

421. ENVIRONMENTAL GEOCHEMISTRY (3). Explores 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.
polution problems. PRQ: Any 100- or 200-level geology course and CHEM 211, 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 300, GEOL 310, MATH 230, and PHYS 250 or PHYS 250A, or consent of department.

429. FIELD GEOLOGY 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 teacher certification. PRQ: Introductory course in physical and historical geology, and consent of department.

442. GEOMORPHOLOGY (3). Crosslisted as GEOG 442X. Systematic study of geologic processes affecting the evolution of the earth's surface. Emphasis on glacial, fluvial, and coastal processes and their relationship to the development of landforms under diverse climates of the past and present. Lecture, laboratory, and field trips. PRQ: GEOG 101A, GEOG 105, GEOG 120, or GEOG 120A, and consent of department.

443X. PRINCIPLES OF PHYSICAL CHEMISTRY (4). CHEM 444. A one-semester course intended for chemistry majors pursuing Emphases 2, 3, or 4. Also suitable for non-majors desiring a course in physical chemistry. Topics covered are thermodynamics, chemical kinetics, and atomic and molecular structure. Not offered for graduate credit for chemistry majors. Four lectures a week. PRQ: CHEM 211, PHYS 251, and MATH 230, or consent of department.

444. ECONOMIC GEOLOGY (3). Introduction to metallic and nonmetallic resources and interrelated processes with special emphasis on 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 310 or consent of department.

447. QUANTITATIVE TECHNIQUES IN GEOLOGY (3). Survey of the methods and practices of quantifying, collecting, analyzing, and summarizing geologic data. PRQ: MATH 155, MATH 210, MATH 229, or consent of department.

470. INVERTEBRATE PALEONTOLOGY (3). Crosslisted as BIOS 469X. The 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. PRQ: Major in biological sciences or geology.

471. INTRODUCTION TO MICROPALEONTOLOGY (3). The morphology, classification, paleogeography, stratigraphic application, and geochemistry of calcareous, siliceous, and phosphatic microfossils. PRQ: BIOS 205 and GEOL 220, or consent of department.

480. THEORETICAL PETROLOGY (3). Origin of igneous and metamorphic rocks with emphasis on theoretical principles such as phase equilibria, thermodynamics, elemental and isotopic concentrations and partitioning, and kinetics. PRQ: GEOL 312 and GEOL 411, 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 305 and GEOL 312 or consent of department.

485. VOLCANOLOGY (3). An examination of volcanoes, types of volcanic eruptions, magma sources and storage, lava flows, and pyroclastic deposits. PRQ: GEOL 305 and GEOL 312, or consent of department.

488. ENVIRONMENTAL CHANGE (3). An examination of the physical, chemical, and biological processes that cause environments to change naturally or under the influence of human activities. Environments at several different size scales will be considered, from small water-sheds/forests, to larger lake systems, to the global atmospheric-ocean system. The course will emphasize 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, GEOE, course, and CHEM 210, and MATH 229 or MATH 210, or consent of department.

490. HYDROGEOLOGY (3). Comprehensive introduction to hydrogeology; groundwater occurrence, physics of flow, aquifer characteristics, basic groundwater chemistry, aspects of groundwater contamination, resources, and environmental hydrogeology. PRQ: Any 100- or 200-level geology course and MATH 229, or consent of department.
525. RADIOACTIVE ISOTOPE GEOLOGY (3). Radioactive decay schemes useful for determining ages of rocks and minerals and investigating the histories of the earth, moon, and meteorites. Use of isotopes as tracers in the study of geologic processes, such as magmatic and metamorphic processes, and the evolution of earth's crust and mantle. PRQ: GEOL 419, and GEOL 524 or GEOL 525, or consent of department.

530. GROUNDWATER MODELING (3). Mathematical and numerical modeling of groundwater flow, with emphasis on finite-difference modeling. PRQ: GEOL 490, FORTRAN, and calculus; or consent of department.

532. ADVANCED GROUNDWATER HYDROLOGY (3). Quantitative examination of groundwater physical hydrology in porous and fractured media, including models for hydraulic tests (pumping, slug, packer), groundwater flow and permeability characteristics, saline-freshwater relations, and application to practical problems. PRQ: GEOL 490 or consent of department.

535. GROUNDWATER GEOLOGY (3). Examination of the geologic controls of groundwater occurrence and movement, hydrogeology of different geologic terrains, and hydrogeology of Illinois. PRQ: GEOL 490 or consent of department.

537. CONTAMINANT HYDROGEOLOGY (3). Sources and types of groundwater contamination; contaminant transport processes and modeling; monitoring, sampling, and assessment; chemical reactions and attenuation processes of organic and inorganic contaminants; remediation. PRQ: GEOL 420 or GEOL 421, and GEOL 490, or consent of department.

544. GLACIAL GEOLOGY (3). Physical properties of ice and the fundamentals of glacier and ice sheet dynamics as they relate to processes of glacier erosion, sediment transport, and deposition. Glacial isostasy of continental interiors and margins, global sea level changes, and late Cenozoic climate cycles. PRQ: GEOL 442 or GEOL 544, or consent of department.

547. QUATERNARY STRATIGRAPHY (3). Systematic study of glacial processes responsible for the formation of complex glacial drift sequences in the mid-continent. Stratigraphic and geochronological methods will be discussed. Pedological, geotechnical, and hydrogeological properties of unconsolidated deposits will be examined in regard to environmental properties. PRQ: GEOL 442 or GEOL 544, or consent of department.

548. STRATIGRAPHY (3). A systematic study of selected aspects of the North American stratigraphic record with emphasis on broad sedimentary patterns and tectonic development.

549. ADVANCED STRUCTURAL GEOLOGY (3). The origin and the mechanics involved in the formation of various structural features occurring in nature. PRQ: GEOL 310 or consent of department.

550. APPLIED GEOPHYSICS: GRAVITY AND MAGNETIC FIELDS (3). Theory and application of gravity and magnetic techniques to investigations of the earth's structure and its physical properties. PRQ: PHYS 251A and MATH 232, or consent of department.

551. APPLIED GEOPHYSICS: SEISMIC AND ELECTRICAL (3). Theory and application of seismological and electrical techniques to investigations of the earth's structure and its physical properties. PRQ: PHYS 251A and MATH 232, or consent of department.

552. PETROLOGY OF CLASTIC SEDIMENTS AND ROCKS (3). The origin of terrigenous clastic sediments and their occurrence in modern environments. Texture, composition, and sedimentary structures of sediments and rocks by megascopic and microscopic methods, including thin sections, emphasized in the laboratory. PRQ: GEOL 411 or consent of department.

553. PETROLOGY OF PRECIPITATED SEDIMENTS AND ROCKS (3). Biogenic and inorganically precipitated modern sediments and their ancient rock analogs: origins, environments, mineralogy, textures, and methods of study, including thin sections. Lectures and laboratory. PRQ: GEOL 411 or consent of department.

554. GEOPHYSICAL FIELD METHODS (3). The application of geophysical laboratory and field instrumentation and techniques to the investigation of geological problems. CRQ: GEOL 486 or consent of department.

555. ADVANCED GEOPHYSICS (3). Regional geophysical measurements and properties of earth's interior and their implications for geodynamics. PRQ: GEOL 550 or GEOL 551, or consent of department.

558. POTENTIAL THEORY (3). Development of potential theory with application to geophysics. Problem of the nonuniqueness and limits of theoretical approximations. PRQ: GEOL 486 and MATH 232, or consent of department.

560. GEOPHYSICAL TIME SERIES ANALYSIS (3). Analysis of time series with emphasis on applications of spectral techniques and linear filtering in the earth sciences. Properties of continuous and discrete Fourier transforms; sampling, design, and use of linear filters; stochastic processes; spectral and cross-spectral density; and fast Fourier transforms. Applications to geophysics, hydrology, and meteorology. PRQ: MATH 232 and CSCI 230, or consent of department.

565. EARTHQUAKE SEISMOLOGY (3). Development of 1-, 2-, and 3-dimensional wave theory. Effects of rheology on seismic wave propagation. Constitutive relations. Body waves and surface waves. Focal mechanisms, body wave modeling, and source parameters. Inverse problems including earthquake location and seismic tomography. PRQ: MATH 240 or consent of department.

570. SPECIAL PROBLEMS IN EARTH SCIENCES (1-3). Independent study under supervision of an adviser. May be repeated to a maximum of 9 semester hours.

575. IGNEOUS PETROLOGY (3). The study of igneous rocks in the earth's crust and mantle, emphasizing phase equilibrium, kinetics, and geochemistry. PRQ: GEOL 480 or consent of department.

580. METAMORPHIC PETROLOGY (3). The study of chemical and petrological principles and processes relevant to metamorphic rocks. Evaluation of metamorphic environment and the controlling mechanisms of metamorphism. PRQ: GEOL 480 or consent of department.

590. SILICEOUS MICROPALOEONTOLOGY (3). An in-depth discussion of siliceous microfossils, their geologic occurrence, and their application to the problems of earth sciences, emphasizing current research advancement. PRQ: GEOL 470 and GEOL 471l, or consent of department.

591. ADVANCED PALEONTOLOGY (3). Biostratigraphy and paleoecology of various fossil groups, and the use of fossils to solve stratigraphic, structural, mapping, and paleo-oceanic problems. PRQ: GEOL 471 or consent of department.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours.

610. GEODYNAMICS (3). A rigorous examination of the processes associated with plate tectonics. Development of the concepts of stress, strain, elasticity, and flexure, and their application to the earth's lithosphere. Analysis of heat flow within the earth, including conduction and convection. Introduction to fluid mechanics as it pertains to the driving forces of plate motions. Effects of crustal and mantle rheology on plate motions and convection. Gravity and seismology as tools for understanding plate tectonics. PRQ: MATH 334 or consent of department.

620. DEPARTMENTAL SEMINAR (0). Weekly reports by graduate students, staff, and guests. Required of all graduate students.

625. WATER RESOURCE GEOCHEMISTRY (3). Chemical composition of water in surface and subsurface aquifers. Equilibrium and disequilibrium chemical reactions occurring in aquifers. The relation between health, disease, and the geochemistry of drinking water. PRQ: GEOL 520 or consent of department.

630. ADVANCED GEOCHEMISTRY (3). Current and classic readings on topics such as nucleoecology, evolution of the earth, composition of the earth's interior, petrogenesis, and development of the atmosphere and ocean. PRQ: GEOL 419, and GEOL 524 or GEOL 525, or consent of department.

645. GROUND VIBRATIONS AND INSTRUMENTATION (3). Application of the theory of periodic motion to the design of geophysical instruments, particularly the seismograph and gravimeter, and to the understanding of seismic wave propagation within the earth. PRQ: GEOL 551 or consent of department.

646. GEOLOGY SEMINAR (1-9).

A. MINERALOGY

B. PETROLOGY

C. STRATIGRAPHY AND SEDIMENTATION

D. REMOTE SENSING

E. GEOMORPHOLOGY

F. QUATERNARY STRATIGRAPHY

G. STRUCTURAL GEOLOGY

H. HYDROLOGY

V. PRECAMBRIAN GEOL.

W. TECTONICS

Y. MICROPALAEONTOLOGY

May be repeated. One to 9 semester hours may be earned in each subdivision.
647. GEOCHEMISTRY SEMINAR (1-9).
A. General Geochemistry
B. Isotope Geochemistry
C. Environmental Geochemistry
May be repeated. One to 9 semester hours may be earned in each subdivision.

648. GEOPHYSICS SEMINAR (1-9).
A. General Geophysics
D. Environmental Geophysics
E. Remote Sensing
J. Engineering Geology
May be repeated. One to 9 semester hours may be earned in each subdivision.

650. INTERPRETATION METHODS IN POTENTIAL FIELDS (3).
Application of various interpretation methods to the solution of geophysical problems using gravity and magnetic data. PRQ: GEOL 550 and working knowledge of FORTRAN, or consent of department.

651. REFLECTION SEISMOLOGY (3). Principles and applications of seismic reflection interpretation techniques used in oil, gas, groundwater exploration, and deep crustal imaging. PRQ: GEOL 493 or GEOL 496 and a working knowledge of FORTRAN, or consent of department.

670. INDEPENDENT RESEARCH IN GEOLOGY (1-3). Individual investigation of special problems in the field of geology under supervision of one or more staff members. May be repeated to a maximum of 6 semester hours. PRQ: 22 semester hours of graduate work in the earth sciences, or consent of department.

680. BASIN ANALYSIS (3). Investigation of sedimentary and biological processes and engineering on continental margins and intracratonic basins. Ancient basin analysis from modern analogues. PRQ: Consent of department.

690. GEOLOGIC PROBLEMS OF THE MIDWEST (3). The nature of geologic problems in midwestern urban and rural environments, including water supply, stream and groundwater pollution, chemical and human waste disposal, and the utilization of and construction in earth materials.

695. APPLIED GEOSCIENCE INTERNSHIP (1-9). At least one semester in duration, during which the student performs the functions of a geoscientist under the direct supervision of qualified personnel approved by the department. May be repeated to a maximum of 9 semester hours.

699. DOCTORAL RESEARCH AND DISSERTATION (credit arranged). May be repeated to a maximum of 39 semester hours.
Department of History (HIST)

Chair: Elaine G. Spencer

Graduate Faculty

Samuel Amaral, associate professor, Ph.D., University of La Plata
Anita M. Andrew, assistant professor, Ph.D., University of California, Berkeley
E. Taylor Atkins, assistant professor, Ph.D., University of Illinois
Joe D. Burchfield, associate professor, Ph.D., Johns Hopkins University
Sundiata Djata, assistant professor, Ph.D., University of Illinois
J. Eric Duskin, assistant professor, Ph.D., University of Michigan
Bruce Field, assistant professor, Ph.D., College of William and Mary
Stephen Foster, professor, Distinguished Research Professor, Ph.D., Yale University
Glen A. Gildemeister, assistant professor, Ph.D., Northern Illinois University
Michael J. Gonzales, professor, Ph.D., University of California, Berkeley
Stephan Halicz, professor, Distinguished Research Professor, Ph.D., St. Andrews University (Scotland)
Beatrix Hoffman, assistant professor, Ph.D., Rutgers University
Stephen R. Kern, professor, Distinguished Research Professor, Ph.D., Columbia University
Samuel Kinsar, professor, Distinguished Research Professor, Ph.D., Cornell University
Paul J. Kleppner, professor, Distinguished Research Professor, Ph.D., University of Pittsburgh
Allan Kulikoff, professor, Ph.D., Brandeis University
W. Bruce Lincoln, professor, Distinguished Research Professor, Ph.D., University of Chicago
Eric W. Mogren, assistant professor, Ph.D., University of Michigan
J. Carroll Moody, professor, Ph.D., University of Oklahoma
James D. Norris, professor, Ph.D., University of Missouri
Joseph J. Parot, professor, Ph.D., Northern Illinois University
Carl P. Parrini, professor, Ph.D., University of Wisconsin
Barbara M. Posadas, associate professor, Ph.D., Northwestern University
Marvin A. Powell, Jr., professor, Distinguished Research Professor, Ph.D., University of Minnesota
Marvin S. Rosen, associate professor, Ph.D., University of California, Berkeley
James D. Schmidt, assistant professor, Ph.D., Rice University
Robert W. Schneider, professor, Ph.D., University of Minnesota
J. Harvey Smith, associate professor, Ph.D., University of Wisconsin
Elaine G. Spencer, professor, Ph.D., University of California, Berkeley
George W. Spencer, professor, Ph.D., University of California, Berkeley
David L. Wagner, associate professor, Ph.D., University of Michigan
Constance Wilson, professor, Ph.D., Cornell University
Nancy Wingfield, assistant professor, Ph.D., Columbia University

Graduate courses in history are principally of three types: advanced lecture-discussion courses, reading seminars designed to acquaint the student with the literature and problems of a selected field, and research seminars in which intensive research on a particular historical topic provides experience in historical methodology and in the use of primary and secondary source materials.

Admission

Admission to the M.A. program in history is based upon consideration of the following factors: general undergraduate GPA; preparation and GPA in undergraduate history courses; scores on the GRE, especially on the verbal and analytical sections of the General Test; letters of recommendation; special requirements in the applicant’s proposed field of study; a brief essay submitted by the applicant; and, where appropriate, proficiency in foreign language(s) or quantitative methods.

The department endeavors to review application data in a comprehensive manner and to avoid mechanical judgments. It prefers, however, that applicants have a general GPA of 3.00 or better in the last two years of undergraduate work, a GPA of 3.25 or better in all undergraduate history courses, and GRE verbal and analytical scores in the 60th percentile or higher. The GRE Subject Test in history is not required. Applicants need not have an undergraduate major in history, but those with fewer than 18 semester hours of undergraduate history courses may be required to enroll in one or more undergraduate courses on a deficiency basis. Applicants to the M.A. program in history are normally notified of an admission decision within three weeks of receipt of all required application materials.

Applicants for admission to the doctoral program are expected to have established an outstanding record at the master’s level and to have demonstrated a capacity for effective research and writing. Admission to the Ph.D. program requires at least average proficiency in one approved foreign language or in quantitative methods. Applicants to the Ph.D. program are notified within a month, except during the summer when processing may take longer.

Advising

At the time of admission to a degree program, a student will be assigned a departmental adviser who will be responsible for implementing department and Graduate School regulations. As early as practical the student should initiate the selection of a field adviser from among the faculty. M.A. students should have at least one such adviser, and Ph.D. students should normally have two. The field advisers are primarily responsible for assisting students in planning a program of study, selecting appropriate courses, outlining problems unique to a particular field, and determining appropriate areas of research. Departmental requirements are detailed in the departmental booklet, Handbook for History Graduate Students.
Master of Arts in History

Students pursuing the M.A. degree in history must satisfactorily complete 30 semester hours of approved credits. A minimum of 24 semester hours must normally be in history courses. The balance may be in history courses or in courses in an approved cognate field or fields. The 30 semester hours required for the M.A. must include a minimum of 18 semester hours in a primary field (of which a minimum of 9 semester hours must be in research credits) and a minimum of 6 semester hours in a secondary field. Within the total of 30 semester hours the student must present a minimum of 6 semester hours in reading seminars. The primary and secondary fields offered in the M.A. program are ancient, medieval, modern European, Russian, Asian, British, United States, and Latin American history. The secondary field may instead be an approved cognate field outside of history.

Various means are available for M.A. students to fulfill the 9 semester hours research requirement of the M.A. degree, but all students must satisfactorily complete at least one formal research seminar. The balance of the credits required may be fulfilled through additional research seminars, completion of a thesis, or independent research. The method selected by the student to fulfill the research requirement must be approved by the department. M.A. students who intend to apply for admission to the Ph.D. program will be expected to submit their M.A. research paper(s) or thesis for review by faculty responsible for approving admission into the Ph.D. program.

All M.A. students, except those majoring in United States or British history who are not planning to continue in the Ph.D. program, must demonstrate at least average proficiency in an approved foreign language or, if appropriate, in quantitative methods. Average proficiency in an approved foreign language can be demonstrated through a translation examination or, in selected languages, through successful completion of one of the special summer courses offered by the Department of Foreign Languages and Literatures. Average proficiency in quantitative methods can be demonstrated by achieving a grade of C or better in an approved course in statistics (STAT 208 or STAT 301) and a grade of B or better in HIST 501.

Students in the M.A. program must satisfactorily complete a written comprehensive examination in their primary field. At the discretion of either the examining committee or the student, the written M.A. comprehensive may be followed by an oral examination about one week after the evaluation of the written examination. There is no examination in the student’s secondary field, but students must achieve a grade of B or better in at least 6 semester hours of course work in that field.

If the student receives a recommendation from the comprehensive examining committee for admission to the Ph.D. program and otherwise makes application and qualifies for such admission, the M.A. comprehensive examination will serve as the Ph.D. qualifying examination.

Option in Historical Administration

The M.A. with an option in historical administration has been designed to meet the needs of those students seeking special educational preparation for careers in public and private historical agencies, archives, museums and historical societies, and research and consulting firms.

Students pursuing the M.A. option in historical administration must satisfactorily complete 36 semester hours of approved credits. A minimum of 24 semester hours in history courses must be completed to meet the normal requirements for the traditional M.A. degree described above. A secondary field is not required.

The remaining 12 semester hours required for this degree option normally must be distributed as follows.

Course Requirements (6–9)
ART 465, Introduction to Museum Studies (3)
HIST 500, Internship in Historical Administration (3–6)
Electives (3–6)
Recommended Electives
ART 554, Museum Administration (3)
ART 555, Curatorial Practice (3)
ART 556, Museum Exhibitions and Interpretation (3)
ART 557, Museum Education (3)
HIST 495, Introduction to Historical Editing (3)
Other Available Electives
ART 493, History of Architecture III: From 1900 (3)
ART 498, History of Architecture II: From 1400-1900 (3)
ART 496A, History of Decorative Arts: Furniture (3)
ART 496B, History of Decorative Arts: Minor Arts and Crafts (3)
ART 596, Studies in American Art (3)
COMS 450X, Instructional Television I (3)
COMS 559X, Instructional Television II (3)
COMS 457, The Documentary Tradition (3)

Comprehensive Examination

Students in the M.A. degree program taking the option in historical administration must satisfactorily complete a written comprehensive examination in a traditional primary field area and an internship-related report, project, or research paper.

Doctor of Philosophy in History

The Department of History regards the Ph.D. degree as both a research and teaching degree and recommends the award of the degree only to those who have met rigorous standards, including the demonstration of excellence in scholarship. Admission to the Ph.D. program implies admission to the primary field specified by the student in his or her application. Subsequent requests to change the primary field of study must be specifically approved by the Department of History.

The primary fields offered in the Ph.D. program are ancient, medieval, early modern European, modern European, Russian, Asian, British, United States, and Latin American history. Secondary fields are of several types: national or area fields such as ancient, medieval, early modern European, modern European, Russian, Asian (with focus on Chinese, Indian, or Southeast Asian), British, United States to 1876, United States since 1865, and Latin American; thematic fields, as defined on a list available from the department; an approved field in a discipline outside history; and a dissertation-related secondary field. Distribution rules for secondary fields are explained below.

Students admitted to the Ph.D. program who have completed the M.A. degree or equivalent elsewhere will be expected to pass an oral qualifying examination on completion of 9-12 semester hours of course work at NIU. This examination will usually come early in the second semester of full-time study.

History Ph.D. students must normally complete a minimum of 90 semester hours as part of the degree program. Approved course work from the M.A. program or equivalent may be counted, provided the hours are consistent with the student’s primary and secondary Ph.D. fields. A maximum of 30 semester hours may be counted for HIST 699, Doctoral Research and Dissertation.

Counting applicable hours from the M.A. program or equivalent, the department expects Ph.D. students to complete about 30 semester hours in a primary field and about 15 semester hours in each of two secondary fields. No course may be counted toward more than one primary or secondary field.

The first secondary field must be a national or area field outside the primary field of study or an approved field in a discipline outside of history, usually one of the social sciences or humanities. The other secondary field may be another national or area field outside the primary field, although students may only elect one secondary field in U.S. history; an approved field in a discipline outside of
history; a thematic field chosen from the list provided by the department; or a dissertation-related field designed in consultation with the student’s dissertation director and the Director of Graduate Studies. Thematic and dissertation-related secondary fields have different requirements from national or area fields. See the department’s Handbook for History Graduate Students for details.

Research-Tool Requirement

Ph.D. students must satisfy one of the following research skill requirements, but it should be emphasized that these are minimal department requirements. Students may be required to establish additional proficiency in certain fields of study and, in any case, the selection must be specifically approved by the student’s major field advisers and, if appropriate, by the Graduate Committee of the department.

The minimal requirements are average proficiency in two approved foreign languages; or high proficiency in one approved foreign language; or average proficiency in one approved foreign language and average proficiency in quantitative methods. Both average and high proficiency in an approved foreign language can be demonstrated through successful completion of an appropriate translation examination. Average proficiency in selected languages can also be demonstrated through successful completion of one of the special summer courses offered by the Department of Foreign Languages and Literatures. Average proficiency in quantitative methods can be demonstrated by achieving a grade of C or better in an approved course in statistics (STAT 208 or STAT 301) and a grade of B or better in HIST 501, Quantitative Methods for Historical Social Analysis (3).

If otherwise approved, a proficiency or proficiencies established previously in an M.A. program, or equivalent, shall be applicable in fulfilling Ph.D. program requirements.

Candidacy Examinations

All Ph.D. students must satisfactorily complete the Ph.D. candidacy examination. This is scheduled when the student has or is about to complete the Ph.D. program of courses, has fulfilled proficiency requirements of the Ph.D. degree, and has otherwise prepared for a comprehensive examination over the primary and secondary fields being offered. The examination should normally be scheduled toward the end of the fourth semester of full-time Ph.D. study or equivalent for part-time students.

The candidacy examination consists of a written examination taken over a five-day period, and an oral examination taken about a week later. Both examinations consist of five sections, three devoted to the primary field and one each for the two secondary fields. Three faculty members normally represent the primary field of study. One faculty member represents each national or area secondary field. In the case of thematic or dissertation-related secondary fields, two faculty members will collaborate on their portion of the written examination, with one or both sitting on the oral examination committee. The oral examination lasts about two hours. It will include but is not limited to discussion of the written examination, and it may include, if appropriate, discussion of the relationship between the candidate’s primary field and his or her proposed dissertation topic. Each committee member is responsible for evaluating the student’s performance on the questions which she or he has prepared, but the committee arrives at one assessment of the overall quality of the student’s performance following the oral examination.

Upon satisfactory completion of the candidacy examination, the student will be certified to the Graduate School as a candidate for the Ph.D. degree. Students who fail the Ph.D. candidacy examination will normally be permitted to sit for the examination a second time after the lapse of an appropriate time interval. A second failure shall be final and shall result in the termination of the student from the Ph.D. program in history.

Dissertation

After the student has satisfactorily completed the candidacy examination, the department’s adviser to Ph.D. students, in consultation with the candidate and his or her field advisers, will arrange a committee of three suitable graduate faculty members to pass on the dissertation proposal of the candidate. The prospective dissertation director will serve as chair of the three-person committee. The dissertation is expected to be a substantial contribution to knowledge in which the student exhibits original scholarship and the ability to conduct independent research.

When a Ph.D. candidate’s dissertation topic and dissertation director have been approved, the candidate and the dissertation director, in consultation with the department’s adviser to Ph.D. students, will identify the appropriate faculty to serve on the candidate’s dissertation reading and defense committee. This committee will consist of four or five faculty members and will be chaired by the dissertation director. One member must be from an academic department outside the Department of History. The composition of this committee must be confirmed by the dean of the Graduate School. The dean or a dean’s designee may also serve as an ex officio, nonvoting member of the dissertation defense committee.

When the dissertation has been substantially approved by the director and at least two other members of the reading committee, the candidate should request the department’s adviser to Ph.D. students to schedule the oral defense of the dissertation. Prior to the defense, the dissertation should have been read in a defensible version by all members of the reading committee and one copy of this version of the dissertation must have been submitted to the Graduate School for review. For further details see the Handbook for History Graduate Students.

In the oral defense the candidate should be prepared to discuss questions relevant to the dissertation, including its thesis, organization, sources, scholarly contribution, and relationship to other literature in the field of inquiry. The defense committee may suggest or require changes and/or corrections in the content and style of the manuscript.

When the dissertation has been approved by the committee, the Department of History will certify to the Graduate School that the candidate has fulfilled the dissertation requirements of the Ph.D. degree and will endorse the candidate’s application for the award of the Ph.D. degree in history.

Foreign Study in History

Since 1956 the Department of History has offered study-abroad programs at regular intervals, usually in cooperation with a British university. The purpose of these programs is to afford students of history and allied disciplines an opportunity to study at first hand the historical developments and traditions of other peoples and their cultures and also to provide personal contact with the locales of important historical events and with the artifacts of the past. Course content, duration of the program, and foreign countries included will vary. Courses carry either undergraduate or graduate credit. Interested students should consult with the department chair or the Division of International Programs for relevant details of forthcoming programs.

Course List

General

492. PRINCIPLES OF HISTORICAL ADMINISTRATION (3). An introduction to the practical application of historical knowledge in such areas as historic preservation, manuscript and archival management, museum administration, library administration, and family history. QRE: Consent of department.

495. INTRODUCTION TO HISTORICAL EDITING (3). An introduction to the nature, basic principles, and professional significance of the editing process in all types of historical literature, including the editing of primary sources, historical journals, and book-length scholarly studies. QRE: Consent of department.
496. MATERIALS AND PROBLEMS OF HIGH SCHOOL INSTRUCTION IN THE SOCIAL SCIENCES (3). Crosslisted as ANTH 496X, ECON 496X, GEOG 496X, POLS 496X, PSYC 496X, and SOCI 496X. Must be taken by students seeking certification in a social science before student teaching. Includes 15 clock hours of clinical experience, attention to the teaching of exceptional students, planning for multicultural learning situations, and techniques of reading in the social sciences. PRQ: Consent of department.

497. PRINCIPLES AND USES OF ORAL HISTORY (3). An introduction to the theory and practice of interviewing as a way of creating, documenting, and interpreting historical evidence. Special attention given to the systematic analysis and practice of editing, indexing, recording, preserving, and transcribing tapes and to the application of oral history to historical research and writing. PRQ: Consent of department.

498. SPECIAL TOPICS IN HISTORY (3).
A. Ancient
B. Medieval
C. Early Modern European
D. Modern European
E. Russian
G. African
J. Asian
K. British
M. United States
N. Latin American
R. General/Comparative

Selected themes or problems. Topics announced in advance. May be repeated to a maximum of 6 semester hours when subject varies.

500. INTERNSHIP IN HISTORICAL ADMINISTRATION (3-6). Work experience in history-related institutions, such as archives, museums, and historical societies and sites, and editing projects. Students will be expected to present reports on their activities and to participate in seminars and colloquia led by specialists in the field. May be repeated to a maximum of 15 semester credit hours only 6 of which may be applied to the master's degree. PRQ: Consent of department.

501. QUANTITATIVE METHODS FOR HISTORICAL SOCIAL ANALYSIS (3). An introduction to the concepts, methods, and techniques involved in the quantitative-behavioral analysis of societal development, including the potentialities and the limitations of data processing and computerized statistical analysis for historians. PRQ: STAT 208 or STAT 301, or consent of department.

502. RESEARCH SEMINAR IN ANCIENT AND MEDIEVAL HISTORY (3). An introduction to the concepts, methods, and techniques involved in the quantitative-behavioral analysis of societal development, including the potentialities and the limitations of data processing and computerized statistical analysis for historians. PRQ: Consent of department.

503. RESEARCH SEMINAR IN GENERAL/COMPARATIVE HISTORY (3). Open to qualified students in accordance with department guidelines. Consent of the faculty member with whom the student wishes to study is necessary. Each topic may be repeated to a maximum of 15 semester hours. PRQ: Consent of graduate adviser.

699. DOCTORAL RESEARCH AND DISSERTATION (1-15). Open only to Ph.D. candidates. May be repeated to a maximum of 30 semester hours. PRQ: Consent of graduate adviser.

Ancient and Medieval History

408. ECONOMIC AND SOCIAL HISTORY OF MEDIEVAL EUROPE (3). Examines the economic and social changes underlying the formation of medieval civilization. Special attention will be given to demographic change, urbanization, and social movements. PRQ: HIST 305 or HIST 306, or consent of department.

530. READING SEMINAR IN ANCIENT AND MEDIEVAL HISTORY (3).
A. Ancient
B. Medieval

Intensive reading and discussion in one or more areas of ancient and medieval history, designed to acquaint the student with the literature and problems of the field. Specific areas to be announced in the Schedule of Classes. Any one area may be repeated to a maximum of 12 semester hours when the subject varies. PRQ: Consent of department.

630. RESEARCH SEMINAR IN ANCIENT AND MEDIEVAL HISTORY (3).
A. Ancient
B. Medieval

Selected problems in the ancient and medieval periods. Specific areas to be announced in the Schedule of Classes. Any one area may be repeated to a maximum of 15 semester hours. PRQ: Consent of department.

European History

410. RISE OF CAPITALISM IN PRE-INDUSTRIAL EUROPE (3). A social and economic history of Europe from the 14th-century crisis to the eve of the Industrial Revolution. Discusses noble and peasant life, urban development, labor organization, and popular rebellion. Features the persistence or decline of feudalism, the rise of banking and trade, merchant capitalism, and rural industry.

412. SOCIAL HISTORY OF MODERN EUROPE (3). An analysis of European society since the Industrial Revolution with reference to the social impact of industrialization and urbanization and changing patterns of social stratification, mobility, and class conflict in the 19th and 20th centuries.

413. FAMILY, SEXUALITY, AND SOCIETY SINCE 1400 (3). The history of the family in Western society as seen in household structures, marriage customs, childbirth and child rearing, sex roles, the life-cycle, and attitudes towards sexual deviance.

415. EUROPEAN THOUGHT IN THE 17TH CENTURY (3). European and British thought of the 17th century; the rise of modern science; and baroque and classical art and literature.

416. THE AGE OF ENLIGHTENMENT (3). The intellectual revolution that preceded the American and French revolutions is considered in its various main aspects, including the growth of secularism and rationalism; the rise of scientific thought; the formulation of political liberalism and radicalism; and the enrichment of the humanist tradition.

417. EUROPEAN THOUGHT AND CULTURE, 1780-1870 (3). Survey of major developments in European intellectual history in the late 18th and early 19th centuries concentrating on the Enlightenment, Romanticism, Positivism, Utilitarianism, and Realism, particularly the philosophy, literature, and art of these movements.

418. EUROPEAN THOUGHT AND CULTURE, 1870-PRESENT (3). Views of the individual and society as revealed in art and literature from Romanticism to Cubism and from Flaubert to Proust; in formal thinkers such as Darwin, Marx, Nietzsche, Einstein, Freud, and Sartre; and in selected topics such as racism, sexual morality, and bourgeois society.

419. HISTORY OF MARXIST THOUGHT AND WRITING (3). An analytically oriented course elucidating the historical corpus of Marx and the historiography which has developed from it.
420. THE RENAISSANCE (3). The 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. AGE OF ABSOLUTISM: EUROPE 1550-1730 (3). An analytical survey emphasizing the changing role of European nobilities, the construction of absolute monarchies, the rise of capitalism, baroque civilization, and the interaction of learned and popular culture.

423. THE FRENCH REVOLUTION AND NAPOLEON (3). Origins of the Revolution of 1789; moderate and radical phases; the Terror and the Thermidorian reaction; the rise of Napoleon; the Napoleonic wars and the remaking of Europe; the revolutionary legacy.

424. HABSBURG MONARCHY, 1815-1918 (3). Cultural, political, social, and diplomatic history of the Habsburg lands from the zenith of the monarchy at the Congress of Vienna to its destruction at the end of the First World War. Topics include the Congress of Vienna, the revolutions of 1848, the growth of national identity and class antagonisms, and cultural continuity and change.

425. WORLD WAR II (3). A military history of World War II, with emphasis on the struggle against Nazi Germany.

426. EAST CENTRAL EUROPE, 1914-PRESENT (3). Cultural, political, and social history of Austria, Czechoslovakia, Hungary, Poland, and Romania from the beginning of the First World War to the present. Topics include the First and Second World Wars, anti-Semitism, fascism, modernism, and the Prague Spring.


428. EUROPEAN DIPLOMATIC HISTORY SINCE 1914 (3). Great power rivalries and competition for empire; two world wars and their consequences; decolonization; cold war and the division of Europe.

429. HITLER'S GERMANY (3). The 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.

540. READING SEMINAR IN EUROPEAN HISTORY (3).
   A. Early Modern European
   B. Modern European
   Intensive reading and discussion over a selected field of European history from the medieval period to modern times. Designed to acquaint the student with the literature and problems of the field. Specific topics to be announced in the Schedule of Classes. Any one area may be repeated to a maximum of 12 semester hours when subject varies. PRQ: Consent of department.

640. RESEARCH SEMINAR IN EUROPEAN HISTORY (3).
   A. Early Modern European
   B. Modern European
   Selected problems in European history from the medieval period to the modern era. Specific topics to be announced in the Schedule of Classes. Any one area may be repeated to a maximum of 15 semester hours. PRQ: Consent of department.

550. READING SEMINAR IN BRITISH HISTORY (3). Intensive reading and discussion in British history designed to acquaint the student with the literature and problems of the field. Specified areas to be announced in the Schedule of Classes. May be repeated to a maximum of 12 semester hours when subject varies. PRQ: Consent of department.

650. RESEARCH SEMINAR IN BRITISH HISTORY (3). Selected problems in the history of Britain. Specified areas to be announced in the Schedule of Classes. May be repeated to a maximum of 15 semester hours. PRQ: Consent of department.

United States History

460. COLONIAL AMERICA TO 1763 (3). A survey of the first two centuries of English settlement in America. Emphasis on the emergence of a colonial culture formed by the interaction of Old World civilizations with the conditions and opportunities posed by the New World.

461. THE AMERICAN REVOLUTION AND NEW NATION: 1763-1815 (3). An examination of the period 1763-1815 dealing with the causes, the character, and the results of the American Revolution, the confederation period, and the Constitution, the presidencies of Washington, Adams, Jefferson, and Madison, the First Party System, and the War of 1812.

463. JACKSONIAN AMERICA: 1815-1850 (3). The United States from the Era of Good Feeling through the Jacksonian democratic movement and the age of Manifest Destiny.

464. CIVIL WAR AND RECONSTRUCTION: 1860-1877 (3). Slavery and the sectional crisis, the war and emancipation, national reconstruction, and economics and race in the postwar South.

465. INDUSTRIAL AMERICA: 1877-1901 (3). The impact of industry and the city on vital aspects of American life and society, with emphasis on the response of farmers, workers, politicians, and intellectuals to the problems of an emerging urban-industrial society.

466. CORPORATE AMERICA: 1900-1929 (3). The U.S. in the era of Theodore Roosevelt, Woodrow Wilson, and Herbert Hoover. Topics include the rising corporate order, labor militance, the origins of the modern state, America's response to war and revolution, 1920s style prosperity, and the Great Crash.

467. LIBERAL AMERICA: 1929-1961 (3). The U.S. in the Great Depression, World War II, and the Cold War. Topics include Franklin D. Roosevelt and the New Deal, the road to Pearl Harbor, total war, social and political change in mid-century America, the Truman Doctrine and Stalinism, the Korean War, the Fifties, civil rights, the Eisenhower presidency, and the American response to revolutions in East Asia.

468. AMERICA SINCE 1960 (3). An 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). A 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). A history of trans-Pacific contacts from the search for a passage to India to the Indochina War. Special attention given to symbol and myth in history, special interest groups, and the development of America's relations with industrially modernizing and traditional agrarian societies.

471. WORKERS IN U.S. HISTORY, 1787-PRESENT (3). Role of workers in American history from the early national period to the present. Emphasis on working class formation, labor conflict, and power relations in developing capitalist economy; how class, race, and gender shaped workers' experiences; rise and decline of labor unions; the role of law and government in limiting or expanding workers' power.

472. TOPICS IN AFRO-AMERICAN HISTORY (3). Selected problems in interpretation relating to the history of people of African descent in the Americas. Emphasis on the black population of the United States with some attention given to the question of race relations. May be repeated to a maximum of 6 semester hours when topic varies.

473. TOPICS IN WOMEN'S HISTORY (3). Selected issues in interpretation relating to the history of women and gender relations. May be repeated to a maximum of 6 semester hours when subject varies.

474. HISTORY OF IMMIGRATION AND ETHNICITY (3). A survey of the nature and impact of immigration in American history from the colonial era to the present which focuses on ethnic group origins, persistence, modification, and interaction. Includes comparative analysis of European, Latino, and Asian immigration. Examines assimilation, acculturation, and accommodation theories, nativism, immigration legislation, multiculturalism, and minority relations.

476. AMERICAN DIPLOMATIC HISTORY TO 1898 (3). American diplomacy, the theory and conduct of foreign affairs, and America's world role from colonial backgrounds to the Spanish-American War.

477. AMERICAN DIPLOMATIC HISTORY SINCE 1898 (3). The theory and practice of American foreign relations, the United States' emergence as a world power, and the conduct of diplomatic affairs from the Spanish-American War to the cold war.

478. AMERICAN LEGAL HISTORY TO 1865 (3). American legal development, including English backgrounds, the colonial and revisionary periods, the development since 1865, including Reconstruction, the impact of the industrial revolution, and such significant 20th-century constitutional issues as civil liberties, segregation, and the government's role in the economy.

510. READING SEMINAR IN U.S. HISTORY (3).

510A. Early American History

510B. 19th Century American History

510C. 20th Century American History

510D. Selected problems in U.S. history. Specific topics will be announced in the Schedule of Classes. Any one area may be repeated to a maximum of 12 semester hours when subject varies. PRQ: Consent of department.

610. RESEARCH SEMINAR IN U.S. HISTORY (3-6).

610A. Early American History

610B. 19th Century American History

610C. 20th Century American History

610D. Selected problems in U.S. history. Specific topics will be announced in the Schedule of Classes. Any one area may be repeated to a maximum of 15 semester hours. PRQ: Consent of department.

Latin American History

482. MEXICO SINCE 1810 (3). The quest for independence--political, economic, and cultural--with particular attention to the revolution of 1910-1920.

483. HISTORY OF PERU (3). Survey of Peruvian history from the conquest of the Inca to the present. Themes include formation of a colonial state, Indians under Spanish rule, African slavery, administrative reform, revolution, imperialism, expansion of export economies, formation of a class society, and militarism.

484. BRAZIL FROM EMPIRE TO REPUBLIC (3). The early emergence of Brazil as a major force in the western hemisphere and its potential as a world power, the evolution of Brazil's political institutions, economy, social structure, and culture.

485. MODERN LATIN AMERICAN REVOLUTIONS (3). Major social revolutions of the 19th and 20th centuries, with emphasis on Mexico, Cuba, and Central America. Social, economic, and political causes, ideology, international influences, and current areas of conflict.

520. READING SEMINAR IN LATIN AMERICAN HISTORY (3). Intensive reading and discussion over a selected field in Latin American history, designed to acquaint the student with the literature and problems of the field. Specified areas to be announced in the Schedule of Classes. May be repeated to a maximum of 12 semester hours when subject varies. PRQ: Consent of department.

620. RESEARCH SEMINAR IN LATIN AMERICAN HISTORY (3). Selected problems in Latin American history. May be repeated to a maximum of 15 semester hours. PRQ: Consent of department.
Department of Mathematical Sciences (MATH, STAT)

Chair: William D. Blair

Graduate Faculty

Ibrahim A. Ahmad, professor, Ph.D., Florida State University
Gregory Ammar, director of graduate studies, professor, Ph.D., Case Western Reserve University
Paul Bailey, adjunct professor, Ph.D., University of Washington
John A. Beachy, professor, Presidential Teaching Professor, Ph.D., Indiana University
Hamid Bellout, professor, Ph.D., Purdue University
Christian Bischof, adjunct assistant professor, Ph.D., Cornell University
William D. Blair, professor, Ph.D., University of Maryland
Harvey I. Blau, professor, Ph.D., Yale University
Richard Blecksmith, associate professor, Ph.D., University of Arizona
Frederick Bloom, professor, Ph.D., Cornell University
Biswa N. Datta, professor, Ph.D., University of Ottawa
Karabi Datta, associate professor, Ph.D., University of Campinas, Brazil
Sien Deng, assistant professor, Ph.D., University of Washington
Neil Dummigan, assistant professor, Ph.D., Harvard University
Nader Ebrahimi, professor, Ph.D., Iowa State University
Harald Ellers, associate professor, Ph.D., University of Illinois
W. Norrie Everitt, adjunct professor, Ph.D., Oxford University
John A. Ewell, professor, Ph.D., University of California, Los Angeles
Carol J. Feltz, associate professor, Ph.D., University of Missouri
Daniel Grubb, associate professor, Ph.D., Kansas State University
Sudhir Gupta, professor, Ph.D., University of Kent
Bernard Harris, professor, Ph.D., University College Cardiff
Kitty I. Holland, assistant professor, Ph.D., University of Illinois, Chicago
Yoo Pyo Hong, associate professor, Ph.D., Johns Hopkins University
Balakrishna Hosmane, associate professor, Ph.D., University of Kentucky
Hui Hu, associate professor, Ph.D., Stanford University
Hans G. Kaper, adjunct professor, Ph.D., Rijksuniversiteit Groningen (Netherlands)
Helen A. Khoury, associate professor, Ph.D., Florida State University
Qingkai Kong, assistant professor, Ph.D., University of Alberta
Man K. Kwong, adjunct professor, Ph.D., University of Chicago
Ying C. Kwong, associate professor, Ph.D., University of Illinois
Victoria B. LaBerge, assistant professor, Ph.D., University of Kansas
Henry S. Leonard, adjunct professor, Ph.D., Harvard University
Rama T. Lingham, associate professor, Ph.D., Purdue University
Anders Linnér, associate professor, Ph.D., Case Western Reserve University
Donald B. McAlister, professor, Ph.D., Queen's University (Belfast)
Jindrich Nacás, professor, Presidential Research Professor, Ph.D., Czechoslovak Academy of Sciences
Thomas W. O’Gorman, associate professor, Ph.D., University of Iowa
Chingt-Tsuan Pan, associate professor, Ph.D., North Carolina State University
Alan Polansky, professor, Ph.D., Southern Methodist University
Donald T. Porzio, assistant professor, Ph.D., Ohio State University
Mohsen Pourahmadi, director, Division of Statistics, professor, Ph.D., Michigan State University
David Rusin, associate professor, Ph.D., University of Chicago

George F. Seelinger, assistant professor, Ph.D., University of Texas, Austin
John L. Selfridge, adjunct professor, Ph.D., University of California at Los Angeles
Linda R. Sons, professor, Distinguished Teaching Professor, Ph.D., Cornell University
Diana Steele, assistant professor, Ph.D., University of Florida
Joseph B. Stephen, associate professor, Ph.D., University of Nebraska
Jeffrey L. Thunder, associate professor, Ph.D., University of Colorado
Peter Waterman, associate professor, Ph.D., University of Aberdeen
Robert F. Wheeler, professor, Distinguished Teaching Professor, Ph.D., University of Missouri
Eddie R. Williams, associate professor, Ph.D., Columbia University
John Wolfskill, assistant chair, associate professor, Ph.D., California Institute of Technology
Hongyou Wu, assistant professor, Ph.D., University of Kansas
Marvin C. Wunderlich, adjunct professor, Ph.D., University of Colorado
Yining Xia, assistant professor, Ph.D., Ohio State University
Zhuan Ye, associate professor, Ph.D., Purdue University
Anton Zettl, professor, Presidential Research Professor, Ph.D., University of Tennessee
Alan Zolman, associate professor, Ph.D., Indiana University

The Department of Mathematical Sciences offers graduate programs leading to the M.S. in applied probability and statistics, the M.S. in mathematics, and the Ph.D. in mathematical sciences. Applicants to these graduate programs are normally notified of an admission decision within three weeks of receipt of the complete application. If a student in an M.S. program has already completed a required 400-level course with a grade of C or better as an undergraduate at NIU, that course requirement will be waived in the student's M.S. program. Other graduate course work will be substituted to complete the required program, with the approval of the student's adviser.

Master of Science in Applied Probability and Statistics

At the time of admission each student is expected to have completed a standard three-course sequence in calculus and a course in elementary linear algebra. Courses equivalent to CSCI 230 and one from STAT 470 and STAT 473, must also have been completed. Any deficiencies should be removed at the beginning of the student's program.

Requirements

Complete at least 30 semester hours of graduate work, not more than 50 percent of which may be in courses numbered 400-499. At least 15 semester hours must be courses offered by the Department of Mathematical Sciences and numbered 500 or above.

Follow a program of study approved by the Department of Mathematical Sciences.

Pass a comprehensive examination based upon his or her plan of study. Usually, a student pursuing full-time graduate study will
be required to take the comprehensive examination within two academic years of admission to the Graduate School. A student who fails the examination may, with the permission of the department, repeat it once.

Course Requirements
With the consent of the department, a student may include STAT 599, Master’s Thesis, for 3 semester hours of credit, in the 30 semester hours required for a master’s degree.

STAT 472, Introduction to Mathematical Statistics (3)
STAT 474, Statistical Methods and Models II (3)
STAT 572, Theory of Statistics (3)
STAT 573, Linear Models (3)
Two courses each from any two of the groups A, B, and C (12)

Group A
STAT 565, Regression Analysis (3)
STAT 566, Discrete Multivariate Data Analysis (3)
STAT 575, Multivariate Methods of Statistics (3)
STAT 591, Statistical Consulting (3)

Group B
STAT 567, Reliability and Survival Analysis (3)
STAT 568, Methods in Biostatistics (3)
STAT 569, Methods for Quality Control and Improvements (3)
STAT 574, Design and Analysis of Experiments (3)

Group C
STAT 471, Probability Models and Applications (3)
STAT 478, Statistical Methods of Forecasting (3)
STAT 570, Probability Theory (3)
STAT 571, Stochastic Processes (3)

At least one of the following
STAT 576, Distribution-Free Statistics (3)
STAT 577, Sampling Techniques (3)
STAT 578, Time Series Analysis (3)
STAT 579, Advanced Statistical Methods (3)
STAT 593, Graduate Reading in Probability and Statistics (1-9)

Master of Science in Mathematics

The Department of Mathematical Sciences offers specializations in pure mathematics, applied mathematics, computational mathematics, and mathematics education within the M.S. degree. Applicants are expected to have completed the equivalent of the requirements for the appropriate emphasis for the B.S. in mathematical sciences at NIU. This requirement may be modified for applicants with promising undergraduate records.

Requirements

The student must complete at least 30 semester hours of graduate work, not more than 50 percent of which may be in courses numbered 400-499. At least 24 of these hours must be in mathematical sciences. All courses outside the Department of Mathematical Sciences must have departmental approval in advance.

The student must follow a program of study approved by the department. The program will be designed by the student and his or her adviser and will be built on the requirements listed under one of the specializations. Students with inadequate backgrounds may be required to remove specific deficiencies.

The student must pass a comprehensive examination in mathematics. Normally, students pursuing full-time graduate study will be required to take the comprehensive examination within two academic years of admission to the graduate school. A student who fails the examination may, with the permission of the department, repeat it once.

With the consent of the department, a student specializing in pure mathematics, applied mathematics, or mathematics education may include MATH 599, Master’s Thesis, for 3 semester hours of credit in the 30 semester hours required for a master’s degree.

Students specializing in computational mathematics are usually required to complete a thesis.

Specialization in Pure Mathematics
MATH 520, Algebraic Structures I (3)
MATH 530, Real Analysis I (3)
MATH 532, Complex Analysis (3)
MATH 550, Topology (3)

Specialization in Applied Mathematics
MATH 423, Linear and Multilinear Algebra (3)
MATH 530, Real Analysis I (3)
MATH 532, Complex Analysis (3),
OR MATH 440, Elements of Complex Analysis (3)
MATH 536, Ordinary Differential Equations I (3),
OR MATH 438, Theory of Differential Equations (3)
MATH 542, Partial Differential Equations I (3),
OR MATH 442, Elements of Partial Differential Equations (3)
MATH 562, Numerical Analysis (3)

At least one of the following
MATH 523, Modern Applied Algebra (3)
MATH 540, Applied Mathematics (3)
MATH 564, Numerical Linear Algebra (3)
MATH 566, Numerical Differential Equations (3)
MATH 584, Combinatorial Mathematics I (3)

Specialization in Computational Mathematics
At the time of admission, each student must have completed courses equivalent to CSCI 230 and MATH 444. Students are strongly advised to take MATH 423, MATH 430, and MATH 431 during their first year, if they have not previously taken these or equivalent courses.

MATH 434, Numerical Linear Algebra (3)
MATH 435, Numerical Analysis (3)
MATH 564, Numerical Linear Algebra (3)
MATH 566, Numerical Differential Equations (3)
MATH 568, Nonlinear Programming (3)
One additional MATH or STAT course numbered above 500 (except MATH 560-MATH 568 and MATH 599)

Thesis Option
The thesis option is usually recommended by the department. Each student pursuing this option must enroll in MATH 599, Master’s Thesis, and submit a written thesis. Three semester hours credit in MATH 599 may be applied toward the degree. The student’s thesis adviser serves as chair of the graduate committee that administers a defense of the thesis.

Non-Thesis Option
The non-thesis option is primarily for students who intend to pursue doctoral work in the mathematical sciences at NIU, or who wish to acquire breadth in the mathematical sciences by taking additional courses. With departmental consent, the student must complete a 30-semester hour program of courses approved by the department and pass a written comprehensive examination.

Specialization in Mathematics Education
MATH 421, Algebra II (3),
OR MATH 423, Linear and Multilinear Algebra (3)
MATH 430, Advanced Calculus I (3)
MATH 510, Theoretical Foundations of Mathematics Education (3)

Four courses in the Department of Mathematical Sciences numbered 421-587 (except MATH 502-MATH 517), including at least one course numbered above 500 (12)

Two of the following (6)
MATH 511, Introduction to Mathematics Education Research (3)
MATH 512, The Teaching of Mathematics, Grades K-9 (3)
MATH 513, The Teaching of Algebra (3)
MATH 514, The Teaching of Geometry (3)
MATH 515, Using Technology in the Teaching of Mathematics (3)

One additional course approved by the department in mathematics, mathematics education, statistics, or supporting work from other departments (3)
**Teacher Certification in Grades 6-12**

A graduate student or a student-at-large may pursue teacher certification in mathematics for grades 6-12. Completing the teacher certification requirements and pursuing a graduate degree may be done simultaneously but are independent. Teacher certification candidates must complete requirements which include courses within the Department of Mathematical Sciences and courses outside the department. Obtaining a teaching endorsement in a second teaching area is desirable to enhance placement opportunities.

Requirements for certification are in three areas: mathematics, professional education, and general education. Forty semester hours of mathematics, beginning with MATH 229 (Calculus I), are required. Professional education requirements total 22 semester hours and can be taken either on the graduate or undergraduate level. General education requirements are usually fulfilled at the undergraduate level. Specific mathematics requirements are listed in the departmental section and undergraduate professional education courses are listed in the departmental advising document. All students who decide to pursue certification should consult a teacher certification adviser in the Department of Mathematical Sciences as soon as possible. Students completing the certification program in mathematics will automatically meet the requirements for the middle school endorsement in mathematics.

**Doctor of Philosophy in Mathematical Sciences**

**Admission**

A student seeking admission to the Ph.D. program in mathematical sciences must meet all requirements for admission to the Graduate School and shall have satisfied the requirements (or equivalent) for the B.S. in mathematical sciences at NIU. In addition, each student is required to have completed an approved year-long sequence of courses in probability and statistics prior to admission to the program, or to take an approved sequence of graduate courses in probability and statistics as part of the doctoral program. Students seeking admission who possess a master’s degree in mathematical sciences will also be expected to have met the above requirements.

**Course Requirements**

The Graduate Studies Committee of the department will be responsible for approving each student’s program to meet the course requirements specified below. Each student will complete at least 90 hours of course work. The committee will assess all work done at other institutions and will grant transfer credit for any graduate work deemed acceptable and subsequently approved by the dean of the Graduate School. The Graduate Studies Committee of the department will also be responsible for the administration of the qualifying and candidacy examinations.

**Core Courses (24)**

- MATH 520, Algebraic Structures I (3)
- MATH 530, Real Analysis I (3)
- MATH 532, Complex Analysis (3)
- MATH 562, Numerical Analysis (3)

One of the following groups of courses (12)

- Group A—at least four of the following
  - MATH 521, Algebraic Structures II (3)
  - MATH 531, Real Analysis II (3)
  - MATH 536, Ordinary Differential Equations I (3)

**Group B**

- MATH 510, Theoretical Foundations of Mathematics Education (3)
- MATH 511, Introduction to Mathematics Education Research (3)
- MATH 513, The Teaching of Algebra (3)
- MATH 514, The Teaching of Geometry (3)

**Group C**

- STAT 570, Probability Theory (3)
- STAT 572, Theory of Statistics (3)
- STAT 573, Linear Models (3)
- STAT 579, Advanced Statistical Methods (3)

At least 21 semester hours of elective topics courses and seminars. One seminar must be elected outside the student’s area of study. The topics courses should ordinarily be chosen from the list below. Repetitions of topics courses and seminars are allowed as subjects vary.

**The applications-involvement component including 3-9 semester hours in MATH 692, Applications Experience (1-9), or equivalent experience**

- MATH 610, Topics in Mathematics Education (3)
- A. Learning and Teaching
- B. Curriculum and Evaluation

**Qualifying Examination**

Whether admission to the program follows completion of a baccalaureate or a master’s degree, each student is required to pass a written qualifying examination administered by the Graduate Studies Committee of the department.

**Candidacy Examination**

The candidacy examination is an oral examination in the student’s primary area of study and is taken later than the qualifying examination. The committee to hear the candidacy examination will be nominated by the chair of the department and appointed by the dean of the Graduate School.

**Language Requirements**

The student must demonstrate average reading proficiency in two of the following foreign languages: French, German, and Russian; or average reading proficiency in one of these languages, combined with a translation of a mathematical research article in this language to the satisfaction of the Graduate Studies Committee of the department.

**Computer Project Requirement**

The student must complete a project in which a computer is used in a nonroutine way. The project will normally be related to the candidate’s primary area of study and must be approved by the candidate’s dissertation adviser and the Graduate Studies Committee.
**Dissertation Committee**
The dissertation committee for each student will be nominated by the chair of the department and appointed by the dean of the Graduate School. This committee will consist of three to five graduate faculty members and be chaired by the dissertation adviser who has been appointed by the chair of the department.

**External Examiner**
An external examiner for the doctoral dissertation will be nominated by the chair of the department and appointed by the dean of the Graduate School. The examiner shall submit a written report on the dissertation to the chair of the department, the dean of the Graduate School, and the student's dissertation committee prior to the oral dissertation defense.

**Oral Dissertation Defense**
An oral examination on the dissertation will be conducted by the graduate faculty members and be chaired by the dissertation committee according to the rules of the Graduate School. This defense will be open to the university community.

**Course List**

**Mathematics (MATH)**

402. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR GRADES K-9 (3). Crosslisted as CIEE 402X. Methods, techniques, materials, curricular issues, learning theories, and research utilized in the teaching of elementary school mathematics. Attention given to the teaching of exceptional students and to planning for multicultural learning situations. Intended for students in education. Accepted for credit as an elementary mathematics methods course, but not as an upper-division mathematical content course. Not open for credit toward the major or minor in mathematics sciences. PRQ: MATH 201 with a grade of C or better or consent of department.

412. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR GRADES 6-12 (3). The objectives and organization of the curriculum and instructional materials for mathematics programs for grades 6-12 with attention to methods of instruction, the needs of exceptional students, reading techniques in mathematics, and planning for multicultural learning situations. Accepted for credit toward the major or minor only for those preparing to teach. Accepted for credit as a methods course for grades 6-12, but not as an upper-division mathematical content course. CRQ: MATH 353 and consent of department.

420. ALGEBRA I (3). Basic theory of commutative rings, the ring of integers, and polynomial rings. Introduction to group theory. PRQ: MATH 240 or consent of department.

421. ALGEBRA II (3). A continuation of MATH 420. Theory of groups, fields, polynomials, algebraic extension fields. Applications to classical problems. PRQ: MATH 420 or consent of department.

423. LINEAR AND MULTILINEAR ALGEBRA (3). The 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). A reexamination 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, or consent of department.

431. ADVANCED CALCULUS II (3). Further study of sequences and series of functions; functions of several variables. PRQ: MATH 430 or consent of department.

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, or consent of department.

434. NUMERICAL LINEAR ALGEBRA (3). Crosslisted as CSCI 434X. Roundoff errors and computer arithmetic. Direct and iterative methods for solving linear systems; norms and condition numbers, iterative refinement. Linear least squares problems: the normal equations and QR approach for overdetermined systems. Numerical methods for eigenvalues: an introduction to the QR iteration. The course makes extensive use of computers. PRQ: MATH 232, MATH 240, and either CSCI 230 or approved equivalent, or consent of department.


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.


440. ELEMENTS OF COMPLEX ANALYSIS (3). A beginning course in complex analysis emphasizing the applications of complex function theory. PRQ: MATH 232 and MATH 240, or MATH 339; or consent of department.


450. INTRODUCTION TO TOPOLOGY (3). The basic notions of metric and topological spaces; additional topics from combinatorial and algebraic topology may be included. PRQ: MATH 430 or consent of department.

456. LINEAR GEOMETRY (3). A treatment of affine and related geometries using the techniques of linear algebra. PRQ: MATH 420 or consent of department.

460. MODELING DYNAMICAL SYSTEMS (3). This course 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. The concepts of equilibrium, stability, bifurcation, limit cycles, and chaos are illustrated. PRQ: MATH 232 and MATH 240 and MATH 336; PHYS 250A and PHYS 251A, 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.

492. ELEMENTARY AND/OR JUNIOR HIGH CURRICULUM (1-6).
A. Elementary School
B. Junior High-Middle School
C. Elementary and Junior High 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 6 semester hours as topic changes. PRQ: Consent of department.

502. TOPICS FOR TEACHERS OF ELEMENTARY SCHOOL MATHEMATICS (3). Contemporary curricula, learning theories and strategies, materials of learning and supporting empirical evidence. PRQ: MATH 402 or consent of department.

510. THEORETICAL FOUNDATIONS OF MATHEMATICS EDUCATION (3). A survey of current developments in areas of human learning that relate directly to mathematics curriculum and instruction. A consideration of curriculum concerns, and an introduction to methods of critical reading of research reports. PRQ: Consent of department.

511. INTRODUCTION TO MATHEMATICS EDUCATION RESEARCH (3). Introduction to the structure and scope of mathematics education research. PRQ: MATH 510 or consent of department.

512. THE TEACHING OF MATHEMATICS, GRADES 6-9 (3). Curriculum goals and issues; recent developments in curriculum; learning research; alternate modes of presentation. Previous teaching experience is recommended. PRQ: MATH 510 or consent of department.
513. THE TEACHING OF ALGEBRA (3). Contemporary approaches to secondary school algebra; treatment of selected topics; instructional aids; individualized instruction; relevant research. Previous teaching experience is recommended. PRQ: MATH 510 or consent of department.

514. THE TEACHING OF GEOMETRY (3). Current programs, aims, issues, and trends in high school geometry; treatment of selected topics; instructional aids; relevant research. Previous teaching experience is recommended. PRQ: MATH 510 or consent of department.

515. USING TECHNOLOGY IN THE TEACHING OF MATHEMATICS (3). Application of technology such as graphing calculators and microcomputers to the teaching of mathematics in secondary schools and the theoretical foundations of these applications; evaluation and analysis of software and graphing calculator activities designed to facilitate learning in such content areas as algebra, geometry, statistics, precalculus, and calculus. PRQ: MATH 510 and consent of department.


518. REAL ANALYSIS II (3). Functional analysis; topics include normed linear spaces, general measure theory, Banach and Hilbert spaces, and operator theory. PRQ: MATH 421 or consent of department.

519. REAL ANALYSIS III (3). Functional analysis; topics include normed linear spaces, general measure theory, Banach and Hilbert spaces, and operator theory. PRQ: MATH 421 or consent of department.

520. ALGEBRAIC STRUCTURES I (3). Group theory including the Sylow theorems, the basis theorem for finite Abelian groups. Polynomial rings, field theory, Galois theory, solvable groups, and solvability of equations by radicals. PRQ: MATH 421 or consent of department.

521. ALGEBRAIC STRUCTURES II (3). Ring theory including the Artin-Wedderburn theorem, the Jacobson radical. Commutative algebra, Noetherian rings, and Dedekind domains. PRQ: MATH 520 or consent of department.

522. HOMOLOGICAL ALGEBRA (3). Categories and functors, projective and injective modules, complexes and homology, Ext, Tor, and dimensions. Applications to cohomology of groups and ring theory. PRQ: MATH 521 or consent of department.

523. MODERN APPLIED ALGEBRA (3). Concepts and techniques of modern algebra which are useful in applied mathematics. Topics covered include applications of group theory to coding, applications of lattice theory to switching theory, and applications of ring theory to linear automata. PRQ: MATH 420 or consent of department.

530. REAL ANALYSIS I (3). The theory of functions of a real variable, including Lebesgue theory and the Lebesgue integral. The basic properties of the classical Lebesgue function spaces are developed. PRQ: MATH 431 or consent of department.

531. REAL ANALYSIS II (3). Functional analysis; topics include normed linear spaces, general measure theory, Banach and Hilbert spaces, and operator theory. PRQ: MATH 450 and MATH 530, or consent of department.

532. COMPLEX ANALYSIS (3). The theory of functions of a complex variable including analytic functions and their properties, sequences and power series, Cauchy's theorem on integration and its consequences, and evaluation of real integrals using residue theory. PRQ: MATH 431 or consent of department.

536. ORDINARY DIFFERENTIAL EQUATIONS I (3). The theory of ordinary differential equations including existence of solutions, uniqueness, stability, oscillation. An introduction to boundary value problems including eigenfunction expansions. Background in Hilbert space theory. PRQ: MATH 430 and either MATH 336 or MATH 436, or consent of department.

537. ORDINARY DIFFERENTIAL EQUATIONS II (3). Continuation of MATH 536. PRQ: MATH 536 or consent of department.

540. APPLIED MATHEMATICS (3). Boundary value problems for ordinary differential operators in one space dimension, Green's functions, theory of distributions, eigenfunction expansions, integral equations. Background in Hilbert space theory. PRQ: MATH 431 or consent of department.

541. APPLIED FUNCTIONAL ANALYSIS (3). Concepts and techniques of functional analysis needed in applied mathematics. Topics covered include basic principles of Banach and Hilbert space theory with applications to convex optimization, integral and differential equations, and variational inequalities. PRQ: MATH 530 or consent of department.

542. PARTIAL DIFFERENTIAL EQUATIONS I (3). Introduction to the theory and applications of partial differential equations. Linear and quasi-linear equations, characteristic curves, and classification and canonical forms with emphasis on first order equations. Introduction to the equations of mathematical physics. PRQ: MATH 431 or consent of department. MATH 432 is strongly recommended.

543. PARTIAL DIFFERENTIAL EQUATIONS II (3). Introduction to Sobolev spaces, elliptic and parabolic equations. Weak solutions, regularity. Approximation of solutions. PRQ: MATH 531 and MATH 542, or consent of department.

548. APPLIED MATHEMATICS MODELLING (3). Survey of problems arising in one or more areas of application of mathematics which are of current research interest, e.g., mechanics, nonlinear continuum theories, wave propagation, nonlinear optics and electromagnetic theory, nonlinear elasticity and viscoelasticity. Concurrent development of the relevant mathematical techniques. PRQ: MATH 530 and one or more of MATH 536, MATH 540, or MATH 542 as appropriate, and consent of department.

550. TOPOLOGY (3). A survey of some major areas of modern topology. Includes a detailed study of compactness and connectedness, an introduction to combinatorial methods for classifying manifolds, and an examination of homotopy theory for maps between topological spaces. PRQ: MATH 421 and MATH 460, or consent of department.

560. AUTOMATA THEORY (3). An introduction to the algebraic theory of automata. PRQ: MATH 420 or CSCI 462, or consent of department.

562. NUMERICAL ANALYSIS (3). Fundamental ideas and tools of numerical analysis and computational mathematics. Analysis of floating-point computations, rootfinding algorithms, interpolation and least-squares approximation by polynomials, numerical integration, direct and iterative methods for linear systems of equations, and numerical solution of initial-value problems for ordinary differential equations. Additional topics as time permits. Mathematical analysis of algorithms and the applicability and limitations of various software modules will be emphasized. Not available for credit to students with credit in MATH 434 and MATH 435. PRQ: MATH 431, knowledge of FORTRAN programming, and consent of department.

563. VECTOR AND PARALLEL COMPUTATIONS IN NUMERICAL LINEAR ALGEBRA (3). Basic concepts of parallel and vector computations. Development of machine-independent algorithms for vector and parallel computations of basic linear algebra problems. Vector and parallel algorithms for linear systems, least squares and eigenvalue problems, and aspects of their implementations on both distributed and shared-memory computers will be discussed. In implementing the algorithms, the use of portable powerful software packages such as LAPACK will be emphasized. Applications to engineering as time permits. PRQ: MATH 434 and good knowledge of the UNIX operating system, or consent of department.

564. NUMERICAL LINEAR ALGEBRA (3). Floating point numbers and rounding errors. Direct and iterative methods for numerical solution of symmetric and nonsymmetric eigenvalue problems. Matrix equations, singular value decomposition, and total least squares. PRQ: MATH 423, MATH 434, and consent of department.

566. NUMERICAL DIFFERENTIAL EQUATIONS (3). A survey of the theory and application of numerical solutions for ordinary and partial differential equations. Includes methods for solving initial value problems, boundary value problems, and eigenvalue problems. Error and stability analyses are discussed. PRQ: MATH 431, MATH 434, and MATH 435, or consent of department.

568. NONLINEAR PROGRAMMING (3). Basic computational methods for minimizing a nonlinear function of one or more variables subject to constraints. Both numerical and theoretical problems will be treated. PRQ: MATH 430 and MATH 444, or consent of department.

580. ANALYTIC NUMBER THEORY (3). The prime number theorem, primes in an arithmetic progression, L-series, and Dirichlet series. PRQ: MATH 440 and MATH 480, or consent of department.

581T. ALGEBRAIC NUMBER THEORY (3). Algebraic number fields, and algebraic number rings. PRQ: MATH 431 or consent of department.


585. COMBINATORIAL MATHEMATICS II (3). Continuation of MATH 584. PRQ: MATH 584 or consent of department.

586. RECURSIVE FUNCTION THEORY AND COMPUTABILITY (3). A study of recursive functions and Turing machines including a proof of the equivalence of the recursive functions and the Turing computable functions. PRQ: CSCI 462 or consent of department.
591. CURRICULUM AND INSTRUCTION IN MATHEMATICAL SCIENCES AT THE COLLEGE LEVEL (3). Study of various components of pedagogy and curriculum in the mathematical sciences at the college level.

592. INTERNSHIP IN MATHEMATICAL SCIENCES (2-6). The internship may be either industrial, consisting of an approved project in industry, or academic, consisting typically of association with a master teacher in the design and implementation of a course. May be repeated to a maximum of 12 semester hours, with no more than 6 semester hours counting toward the M.S. degree. PRQ: Consent of department.

596. TOPICS IN CONTEMPORARY MATHEMATICS EDUCATION (1-9). Intensive study of special topics in mathematics and mathematics education selected to meet the needs of teachers of mathematics at the precollege level. May be repeated to a maximum of 18 semester hours. PRQ: Consent of department.

597. GRADUATE RESEARCH IN MATHEMATICAL SCIENCES (1-9).
   A. Pure Mathematics
   B. Applied Mathematics
   E. Mathematics Education
   May be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

598. TOPICS IN CONTEMPORARY MATHEMATICS (1-6). Faculty and student discussion of selected topics in contemporary mathematics. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

610. TOPICS IN MATHEMATICS EDUCATION (3).
   A. Learning and Teaching
   B. Curriculum and Instruction
   Content varies; may include courses on theoretical issues concerned with learning, instruction, and curriculum in mathematics. May be repeated to a maximum of 15 semester hours. PRQ: Consent of department.

620. TOPICS IN ALGEBRA (3). Content varies; may include courses in semigroup theory, finite group theory, ring theory, and homological algebra. May be repeated to a maximum total of 15 semester hours. PRQ: Consent of department.

630. TOPICS IN ANALYSIS (3). Content varies; may include courses in real analysis, complex analysis, functional analysis, and differential equations. May be repeated to a maximum total of 15 semester hours. PRQ: Consent of department.

640. TOPICS IN APPLIED MATHEMATICS (3). Content varies; may include courses in differential equations and mathematical physics. May be repeated to a maximum total of 15 semester hours. PRQ: Consent of department.

650. TOPICS IN GEOMETRY AND TOPOLOGY (3). Content varies; may include courses in algebraic topology, point set topology, and algebraic geometry. May be repeated to a maximum of 15 semester hours. PRQ: Consent of department.

660. TOPICS IN COMPUTATIONAL MATHEMATICS (3). Content varies; may include courses in numerical analysis, mathematical programming, mathematical modeling, and computational complexity. May be repeated to a maximum of 15 semester hours. PRQ: Consent of department.

670. TOPICS IN PROBABILITY THEORY (3). Content varies. May be repeated to a maximum of 15 semester hours. PRQ: Consent of department.

680. TOPICS IN NUMBER THEORY (3). Content varies; may include courses in algebraic, analytic, computational, and combinatorial number theory. May be repeated to a maximum of 15 semester hours. PRQ: Consent of department.

689. SEMINAR IN THE MATHEMATICAL SCIENCES (1-9).
   A. Algebra
   B. Analysis
   C. Applied Mathematics
   D. Geometry and Topology
   E. Computational Mathematics
   J. Probability Theory
   K. Number Theory
   M. Mathematics Education
   Lectures and discussions on topics in advanced mathematics. One to 9 semester hours as scheduled. May be repeated to a maximum of 24 semester hours, not more than 15 of which may be selected in a single area. PRQ: Consent of department.

692. APPLICATIONS EXPERIENCE (1-9). Field experience for the doctoral student in applications of the mathematical sciences. May be repeated to a maximum of 18 semester hours with no more than 9 semester hours counting toward the Ph.D. degree. PRQ: Consent of department.

699. DOCTORAL RESEARCH AND DISSERTATION (1-15). May be repeated to a maximum of 36 semester hours.

Statistics (STAT)

470. INTRODUCTION TO PROBABILITY THEORY (3). The mathematical study of probability including probability spaces, random variables, discrete, continuous, mixed probability distributions, moment generating functions, multivariate normal distribution, expectation, special distributions, laws of large numbers, and central limit theorem. PRQ: MATH 232 and MATH 240, or consent of division.

471. PROBABILITY MODELS AND APPLICATIONS (3). An introduction to elementary stochastic processes and their applications to various phenomena in engineering, management science, the physical and social sciences, and operations research. PRQ: STAT 470 or consent of division.

472. INTRODUCTION TO MATHEMATICAL STATISTICS (3). An introductory study of mathematical statistics including distributions of functions of random variables, interval estimation, sufficiency, completeness, point estimation, statistical hypotheses, analysis of variance, and the multivariate normal distribution. PRQ: STAT 470 or consent of division.

473. STATISTICAL METHODS AND MODELS I (3). A first course in statistical methods and models including exploratory data analysis and graphical techniques, regression analysis, experimental design, and basic sampling techniques. Extensive use of statistical computer packages. PRQ: MATH 211 and STAT 301, or STAT 350, or consent of division. CRQ: STAT 473A.

473A. STATISTICAL COMPUTING PACKAGES (1). Introduction to statistical computing with the aid of software packages. Data entry, transformations, simple plots, summary statistics, and statistical procedures. No previous computer experience is required. PRQ: MATH 211 and STAT 301, or STAT 350, or consent of division. CRQ: STAT 473 or consent of division.

474. STATISTICAL METHODS AND MODELS II (3). Continuation of STAT 473. Topics include cluster sampling, two-level factorial experiments, confounding and fractional replications, analysis of discrete data, an introduction to time series analysis, control charts for quality, and productivity analysis. PRQ: STAT 473 and STAT 473A, or consent of division.

478. STATISTICAL METHODS OF FORECASTING (3). Introduction to forecasting including use of regression in forecasting; removal and estimation of trend and seasonality; exponential smoothing; stochastic time series models; stochastic difference equations; autoregressive, moving average, and mixed models; model identification and estimation; diagnostic checking; and the use of time series models in forecasting. PRQ: STAT 473 or consent of division.

565. REGRESSION ANALYSIS (3). Simple and multiple linear regression, estimation, confidence intervals and tests, and prediction. Diagnostic methods using residuals, transformations, outliers, and influence analysis. Polynomial regression, stepwise variable selection, and collinearity. PRQ: STAT 474 or consent of division.

566. DISCRETE MULTIVARIATE DATA ANALYSIS (3). A first course in the analysis of discrete data including two-dimensional tables, the log linear model, goodness-of-fit of the model, measures of dependence, three and higher dimensional tables, hierarchical models, model selection, ordered categories, logit model, zero frequency problems, and introduction to Bayesian analysis of categorical data. PRQ: STAT 472 and STAT 474, or consent of division.

567. RELIABILITY AND SURVIVAL ANALYSIS (3). Survival function, failure rate, types of censored data, estimation for parametric models, non-parametric estimation of survival function, accelerated life tests, competing risks, and Bayesian analysis of survival data. PRQ: STAT 472 and STAT 474, or consent of division.

568. METHODS IN BIOSTATISTICS (3). Survival function, failure rate, types of censored data, life tables, regression models for life-time data, bioassay, direct assay, and indirect assays with quantitative response, and clinical trials. PRQ: STAT 472 and STAT 474, or consent of division.
569. METHODS FOR QUALITY CONTROL AND IMPROVEMENT (3). Control charts for attributes and variables, special control charts, process control techniques, acceptance sampling, process capability, Taguchi's approach to improving quality of a product, and the philosophy of Deming. PRQ: STAT 472 and STAT 474, or consent of division.


572. THEORY OF STATISTICS (3). Exponential class, elements of decision theory, unbiased estimation, shrinkage estimators, methods for estimating standard errors, multiparameter estimation, generalized likelihood ratio tests, sequential probability ratio test, and linear models. PRQ: STAT 472 or consent of division.

573. LINEAR MODELS (3). The theory of linear models with applications to the analysis of variance and regression and to the design of experiments. PRQ: STAT 472 and STAT 474, or consent of division.

574. DESIGN AND ANALYSIS OF EXPERIMENTS (3). An intermediate course in the design and analysis of experiments including linear models of less than full rank, distributions of quadratic forms, estimable functions, confounding, fractional replication, incomplete block, hierarchical, Latin square, cross-over, split plot, repeated measures and related designs, response surface methods, covariance analysis. PRQ: STAT 472 and STAT 474, or consent of division.

575. MULTIVARIATE METHODS OF STATISTICS (3). An introduction to the techniques of multivariate analysis including description of multivariate data, reducing the dimension, principal components, factor analysis, estimation and testing for the parameters in multivariate normal populations, and multivariate analysis of variance. Problems which involve the use of computers will be treated. PRQ: STAT 472 or STAT 474, or consent of division.

576. DISTRIBUTION-FREE STATISTICS (3). A survey of nonparametric statistical techniques and their logical foundations including the distributions of order statistics and ranks, tests of hypotheses, confidence intervals and Hodges-Lehmann estimators for one-sample, two-sample, and paired-sample location problems, the two-sample dispersion problem, analysis of one-way and two-way layouts, tests of independence, goodness-of-fit tests, linear rank statistics, and U-statistics. PRQ: STAT 472 or STAT 474, or consent of division.

577. SAMPLING TECHNIQUES (3). An introduction to sample survey techniques and sampling theory including estimation of population parameters based on simple random sampling, cluster sampling, stratified sampling, and ratio sampling. Included will be a summary of recent advances in sampling theory and discussions of practical problems and sources of error in surveys. PRQ: STAT 472 or STAT 474, or consent of division.

578. TIME SERIES ANALYSIS (3). A course in models for analysis of time series data including mean and covariance functions of stationary time series, moving average, autoregressive and mixed models, identification and estimation in ARMA (p,q) models, asymptotic properties of least squares and other estimators, periodogram and spectral analysis, and regression with time series error. PRQ: STAT 472 and STAT 474, or consent of division.

579. ADVANCED STATISTICAL METHODS (3). Various topics discussed from the perspective of modeling and analyzing data. Emphasis on application of statistical methodology. Data analytic techniques illustrated with several types of data including categorical data, multivariate data, survival data, linear and nonlinear regression data, time series data, and data from designed experiments. Extensive use of modern statistical software. PRQ: STAT 472 and STAT 474, or consent of division. Recommended: MATH 562.


593. GRADUATE READING IN PROBABILITY AND STATISTICS (1-9). May be repeated to a maximum of 9 semester hours. PRQ: Consent of division.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours. PRQ: Consent of division.

675. TOPICS IN STATISTICS (3). Content varies; may include courses in linear models, estimation, hypothesis testing, decision theory, and Bayesian inference. May be repeated to a maximum of 15 semester hours. PRQ: Consent of division.

690. SEMINAR IN STATISTICS (1-9). Discussions on topics in advanced probability and statistics as scheduled. Topics include but are not limited to probability theory, stochastic processes, statistical inference, nonparametric statistics, multivariate analysis, linear and nonlinear models, discrete data analysis, time series. One to 9 semester hours as scheduled. May be repeated to a maximum of 24 semester hours, not more than 15 of which may be on a single topic. PRQ: Consent of division.
The Department of Philosophy offers a graduate program leading to the M.A. degree which is designed to prepare students for positions in government and industry where a broad liberal arts background with strong critical training is desired. Students planning to enroll for graduate courses in philosophy should consult their advisers before registering.

Admission requirements are those established for admission to the Graduate School, plus the baccalaureate degree with a major or strong minor in philosophy. In addition, the Department of Philosophy may require a student to remedy specific deficiencies in preparation by enrolling without graduate credit in certain courses.

Course List

402. PHILOSOPHY OF LOGIC (3). A consideration of the various definitions of logic and theories of its role in mathematics, natural science, and philosophy. Texts will be selected from such philosophers as Aristotle, Hegel, Mill, Peirce, Bradley, Dewey, and Strawson. PRQ: PHIL 302 or consent of department.

403. PHILOSOPHY OF MATHEMATICS (3). Problems in the interpretation of mathematics, e.g., the philosophical importance of non-Euclidean geometries, the arithmeticization of analysis, Godel's incompleteness theorem, and such general philosophies of mathematics as formalism, intuitionism, and logicism. Readings will be drawn from such philosophers as Kant, Frege, Russell, Poincare, and Quine. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

404. PHILOSOPHY OF LANGUAGE (3). A study of philosophical problems concerning language, including issues of syntax, semantics, pragmatics, and hermeneutics. Topics include meaning, reference, logical form, modalities, tenses, metaphor, indexical terms, indirect discourse, anaphora, theories of truth, and semantic paradoxes.

405. INTERMEDIATE LOGIC (3). A 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 302 or consent of department.

411. THEORIES AND PROBLEMS OF KNOWLEDGE (3). A study of various contemporary views of knowledge. Consideration of such problems as the conditions of meaning; the nature of truth; the relationship between sensation, perception, and intuition; the difference between knowing and believing; methods of verification; and types of judgment. Analysis of the works of such philosophers as Meinong, Husserl, Brentano, Russell, Lewis, Wittgenstein, and Austin. Emphasis on either analyzing several theories of knowledge or tracing a problem through the thought of several philosophers. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

412. METAPHYSICS (3). A study of contemporary speculative and descriptive metaphysical theories dealing with such areas as cosmology and ontology. Critical exegesis of the writing of philosophers such as Whitehead, Bergson, Goodman, Sartre, and Strawson. PRQ: PHIL 302 or consent of department.

420. MAJOR PHILOSOPHERS (3). An intensive study of the work of one major figure from the history of philosophy. Selection made from such figures as Aquinas, Descartes, Hume, Hegel, Heidegger, and Wittgenstein. May be repeated to a maximum of 9 semester hours as the subject matter varies. PRQ: Consent of department.

421. PLATO (3). PRQ: 6 semester hours of philosophy at the 300 level including PHIL 321 or consent of department.

422. ARISTOTLE (3). PRQ: 6 semester hours of philosophy at the 300 level including PHIL 321 or consent of department.

423. MEDIEVAL PHILOSOPHY (3). PRQ: 6 semester hours of philosophy at the 300 level including PHIL 321 or consent of department.

424. 17TH AND 18TH CENTURY EMPIRICIST PHILOSOPHIES (3). A critical exegesis of selected writings by such philosophers as Locke, Berkeley, Hume, and Reid. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

425. 17TH AND 18TH CENTURY RATIONALIST PHILOSOPHIES (3). A critical exegesis of selected writings by such philosophers as Descartes, Malebranche, Spinoza, Leibniz, and Wolff. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322, or consent of department.

426. KANT (3). PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322, or consent of department.
427. 19TH CENTURY PHILOSOPHY (3). A critical exegesis of selected writings representative of significant philosophical developments in 19th century thought with emphasis on post-Kantian idealism. Texts chosen from characteristic issues: for example, foundations of quantification theory, including Herbrand's theorem, Lowenheim-Skolem theorem, Godel's completeness theorem; basic proof theory, including Godel's incompleteness theorem; elements of recursive function theory and undecidability theorems; and axiomatic set theory. The relevance of symbolic logic to the analysis of philosophical problems. PRQ: Consent of department.

428. 20TH CENTURY ANALYTIC PHILOSOPHIES (3). A critical exegesis of selected writings by such philosophers as Hegel, Schopenhauer, Kierkegaard, Comte, J. S. Mill, Nietzsche, and Mach. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322, or consent of department.

429. 20TH CENTURY PHENOMENOLOGICAL PHILOSOPHIES (3). A critical exegesis of selected writings by such phenomenological philosophers as Husserl, Heidegger, Sartre, Marion-Ponty, Ricoeur, Levinas, and Derrida. Examination of the phenomenological method and its relation to scientific, structuralist, hermeneutic and/or literary-deconstructive methods. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322, or consent of department.

430. CONTEMPORARY ETHICAL THEORY (3). A study of the major problems and theories under discussion by specialists in ethical theory. Emphasis on meta-ethical problems and the analysis of ethical concepts. Readings selected from such philosophers as Tolmijn, Nowell-Smith, Baier, Hare, and Rawls. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

431. PHILOSOPHY OF MIND (3). Some recent developments in philosophy having a bearing on such concepts as perception, thought, intentionality, belief, and the role of these concepts in such philosophical problems as the relation of mind and body, the veridicality of perception, and the nature of personal identity. PRQ: Consent of department.

432. THEORIES OF VALUE (3). A study of the major theories of value experience, evaluation, and the language of value. Analysis of the works of major theorists such as Dewey, Croce, C. I. Lewis, Perry, and Stevenson, as well as recent articles in the field. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

433. PHILOSOPHY OF CULTURE (3). Various philosophical theories of culture and the areas of cultural life such as myth, religions, language, art, history, and sciences. Consideration of the works of such philosophers as Collingwood, Cassirer, Dewey, Whitehead, and Ortega y Gasset. Emphasis on the relevance of an analysis of culture for philosophical understanding. Designed to be of interest to advanced students in the humanities. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

434. PRINCIPLES OF RESEARCH (3). An introduction to the philosophy of research in the natural and social sciences. PRQ: Consent of department.

435. 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 reading. May be repeated to a maximum of 6 semester hours as the subject matter changes. PRQ: Consent of department.

436. SEMINAR IN PHILOSOPHY (3). An intensive study of one major problem or position in historical or contemporary philosophy. May be repeated to a maximum of 9 semester hours toward any one degree provided no repetition of subject matter occurs. PRQ: Consent of department.

437. APPLIED PHILOSOPHY (3). Special topics in advanced ethical, political, or social theory. Topics may vary from semester to semester. PRQ: Consent of department.

438. Special topics in the history of philosophy. May be repeated to a maximum of 12 semester hours, providing no repetition of subject matter occurs. PRQ: Consent of department.

439. APPLIED ETHICAL THEORY (3). Special topics in advanced ethical theory. May be repeated to a maximum of 6 semester hours as the subject matter changes. PRQ: Consent of department.

440. PHILOSOPHY OF SCIENCE (3). Topics in the philosophy of science. A consideration of such problems as confirmation, the ontological status of theoretical entities, the role of conventions in science, the logic of discovery, and the nature of scientific progress. PRQ: Consent of department.

441. 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. PRQ: Consent of department.

442. SPECIAL TOPICS IN RELIGIOUS PHILOSOPHY (3). May be repeated to a maximum of 6 semester hours as topics change. PRQ: Consent of department.

443. SPECIAL STUDIES AND RESEARCH (1-6). Guided research for students wishing to do special studies of an advanced nature. Students will be expected to write a number of short papers and will select their research topics in consultation with the instructor. May be repeated to a maximum of 12 semester hours, providing no repetition of subject matter occurs. PRQ: Consent of department.

444. THESIS (1-6). Guidance in the writing of the master's thesis. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.
Master of Science in Physics

A student pursuing the M.S. in physics must complete a minimum of 30 semester hours and satisfy the requirements in one of the specializations described below.

The proficiency examination in any of the specializations should be taken during the first or second semester of residence. It normally should be passed in the second semester in order for the student to be considered for continuing financial assistance.

All graduate students are required to register for PHYS 698, Physics Seminar, each semester. No more than 6 semester hours of credit in PHYS 599, Master's Thesis, may be applied toward the required 30 semester hours for the M.S. degree.

Specialization in Basic Physics

Completion of 24 semester hours in physics, including the following.

- PHYS 400, Analytical Mechanics II (3), or PHYS 500, Classical Mechanics (3)
- PHYS 560, Quantum Mechanics I (3)
- PHYS 561, Quantum Mechanics II (3)
- PHYS 570, Electromagnetic Theory I (3), or PHYS 571, Electromagnetic Theory II (3)

Passage of a proficiency examination in mechanics, electricity and magnetism, thermodynamics, optics and modern physics.

Submission of an acceptable thesis and passage of an oral examination thereon.

Specialization in Applied Physics

Three of the following (9)

- PHYS 420, Acoustics I (3)
- PHYS 430, Optics (4)
- PHYS 463, Thermodynamics, Kinetic Theory, and Statistical Mechanics (3)
- PHYS 474, Methods of Experimental Physics (3)
- PHYS 475, Advanced Electronics (3)
- PHYS 480, Introduction to Materials Science

Two of the following (6)

- PHYS 501, Mechanics of Continuous Media (3)
- PHYS 560, Quantum Mechanics I (3)
- PHYS 563, Statistical Physics I (3)
- PHYS 566, Solid State Physics I (3)

Passage of a proficiency examination which may include a special area examination (e.g., acoustics, biophysics, geophysics) in place of one section of the proficiency examination.

Submission of an acceptable thesis and passage of an oral examination thereon.

Specialization in Physics Teaching

Completion of 24 semester hours in physics, including at least 12 semester hours at the 500 level or above.

Passage of a proficiency examination with an option of course work in a related science substituted for one area of proficiency examination.

Submission of an acceptable thesis and passage of an oral examination thereon; or submission of two papers, one of which may pertain to teaching of physics or history and philosophy of physics.

PHYS 592, Seminar on College Teaching of Physics (2), or one year of successful teaching experience.

Course List

400. ANALYTICAL MECHANICS II (3). Tensors, variational principles, introduction to Lagrangian and Hamiltonian formulation, dynamics of rigid bodies, introduction to relativistic dynamics, oscillating systems. PRQ: PHYS 365 or consent of department.

410. COMPUTERS IN PHYSICS (3). Review of methods of problem solving in a large sample of the areas of basic physics. Techniques of numerical analysis and FORTRAN programming are applied to the solution of physics problems by computer. PRQ: PHYS 365 and CSCI 230, or consent of department.

420. ACOUSTICS I (3). Vibrating strings, bars and plates, acoustic wave equation, transmission and absorption of sound, radiation, and filters. PRQ: PHYS 367 and PHYS 370, or consent of department.

421. ACOUSTICS II (3). Radiation and scattering of sound, resonators, ducts, filters, nonlinear vibrations, architectural acoustics, and transducers. PRQ: PHYS 420 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 367 and PHYS 370, or consent of department.

432. SOLAR ENERGY COLLECTION AND CONVERSION (3). Solar radiation characteristics, radiation thermodynamics, thermodynamics and optics of concentrating collectors, selective absorption, interference stacks, direct electric solar conversion (photovoltaic and thermal e.m.f.), thermal storage and retrieval. PRQ: PHYS 320 and PHYS 367, or consent of department.
434. NUCLEAR ENERGY (3). Nuclear fission, radioactivity, dose determinations, shielding, comparison of various types of fission reactors (burners and breeder), nuclear fusion, prospective techniques for controlled fusion reactions. Waste management. PRQ: PHYS 360 or consent of department.

436. ENERGY CONVERSION (3). Generation of electrical power from fossil fuel plants, nuclear reactors, wind machines, solar power towers, solar farms, and ocean thermal gradients. Electric transmission. Heat engines. PRQ: PHYS 320 or consent of department.

460. QUANTUM PHYSICS (3). Schrodinger's equation, eigen-values and eigen-functions, methods of approximation, and applications to the square well, the harmonic oscillator, and hydrogen-like atoms. PRQ: PHYS 385 or consent of department.

461. MODERN PHYSICS (3). Applications of quantum physics to atoms, molecules, solids, nuclei, and elementary particles. PRQ: PHYS 460 or consent of department.

463. THERMODYNAMICS, KINETIC THEORY, AND STATISTICAL MECHANICS (3). The thermodynamics section will review such topics as the laws of thermodynamics, the entropy concept, and thermodynamic potentials. Probability, distribution functions, and transport phenomena are treated in the kinetic theory portion. An introductory treatment of classical and quantum statistical mechanical principles will be given. The course will stress applications to areas of modern physics. PRQ: PHYS 320 or consent of department.

467. NOISE AND VIBRATION CONTROL (3). Includes mechanical vibrations, damping, resonance, vehicle noise, acoustical enclosures, and techniques of noise abatement and measurement. PRQ: PHYS 300, PHYS 367, or TECH 367, or consent of department.

470. ELECTRICITY AND MAGNETISM II (3). Mathematical treatment of electric and magnetic fields, Maxwell's equations and applications. PRQ: PHYS 370 or consent of department.

472. PHYSICAL MEASUREMENTS (2). Special laboratory problems. PRQ: Consent of department.

474. METHODS OF EXPERIMENTAL PHYSICS (3). Basic techniques of experimental physics, including high-vacuum techniques, digital electronics, design and construction of research apparatus, radiation safety, etc. Open to graduate students and advanced undergraduate students in all sciences. Strongly recommended for all graduate students in physics. PRQ: PHYS 395X or consent of department.

475. ADVANCED ELECTRONICS (3). Digital electronics, digital-to-analog and analog-to-digital conversion, mini and microcomputers, high-frequency instrumentation, and computer methods. This course is intended primarily for students in the experimental sciences. Two lectures and one 3-hour laboratory per week. PRQ: PHYS 395X 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 300 or consent of department.

480. INTRODUCTION TO MATERIALS SCIENCE (3). Mechanical, thermal, electrical, optical, and structural properties of modern engineering materials. PRQ: PHYS 300, PHYS 360, and PHYS 370, or consent of department.

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 or consent of department.

492. SCIENCE TEACHING IN THE ELEMENTARY, MIDDLE, AND JUNIOR HIGH SCHOOL: GRADES K-9 (3). 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. Course 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 and consent of department.

495. TEACHING OF PHYSICAL SCIENCES (3). Crosslisted as CHEM 495X, GEOG 495X, and GEOI 495X. Preparation for certification in grades 6-12 in one or more of the fields of physical science: physics, chemistry, earth science, and general science. Examination and analysis of modern curricula; classroom and laboratory organization; microteaching and observation of teaching; lesson planning; multicultural education; teaching science to the exceptional child; reading and the teaching of science; and methods of evaluation. Includes 15 clock hours of clinical experience. PRQ: Consent of department.

500. CLASSICAL MECHANICS (3). Hamiltonian formulation, canonical transformations, Hamilton-Jacobi theory, special relativity, continuous media and fields. PRQ: PHYS 400 or consent of department.

501. MECHANICS OF CONTINUOUS MEDIA (3). Statics of fluids, hydrodynamics, theory of elasticity, vortex theory. PRQ: PHYS 400 or consent of department.

505. INSTITUTE FOR SCIENCE TEACHERS (1-8). Lectures, demonstrations, laboratory work, and field trips, designed for the science teacher. Subject matter from the fields of chemistry, physics, biology, and earth sciences. May be repeated to a maximum of 16 semester hours. Application to institute director and by invitation only.

559. SPECIAL PROBLEMS IN PHYSICS (1-10). Special problems in physics under supervision of staff. May be repeated to a maximum of 10 semester hours. PRQ: Consent of department.

560. QUANTUM MECHANICS I (3). Linear vector spaces, principles of wave mechanics, one-dimensional problems, central forces, angular momentum, spin, methods of approximation. PRQ: Consent of department.

561. QUANTUM MECHANICS II (3). Symmetry principles, theory of scattering, identical particles, many-electron atoms, relativistic electron. PRQ: PHYS 560 or consent of department.

563. STATISTICAL PHYSICS I (3). Review of thermodynamics, kinetic theory and the Boltzmann transport equation, classic ensemble theory, the H theorem, elementary quantum statistics. CRQ: PHYS 460 or consent of department.

566. SOLID STATE PHYSICS I (3). Crystal structure, lattice vibrations, thermal and transport properties, free electron and band theories, Brillouin zones, Fermi surfaces, semiconductors. PRQ: PHYS 460 or consent of department.

567. SOLID STATE PHYSICS II (3). Symmetry and crystal field theory, magnetic properties, lattice vacancies, diffusion, optical properties, superconductivity. PRQ: PHYS 566 or consent of department.

570. ELECTROMAGNETIC THEORY I (3). Maxwell's equation, plane waves in isotropic and anisotropic dielectrics, conducting media, wave guides and plasmas, dipole radiation and diffraction. PRQ: PHYS 470 or consent of department.

571. ELECTROMAGNETIC THEORY II (3). Radiation from moving charges, relativistic formulation of electrodynamics, collisions and scattering, multipole radiation, radiation damping and self forces. PRQ: PHYS 470 or consent of department.

574. METHODS OF EXPERIMENTAL PHYSICS: SPECTROSCOPY (3). Various experimental methods and applications of spectroscopy including optical, nuclear, Mossbauer, X-ray diffraction, electron spin resonance, and nuclear magnetic resonance. PRQ: PHYS 474 or consent of department.

580. ATOMIC AND MOLECULAR PHYSICS (3). Atomic spectra, Zeeman effect, Stark effect, hyperfine structure. PRQ: Consent of department.

582. NUCLEAR PHYSICS I (3). Nuclear properties, the deuteron problem, nucleon-nucleon scattering, nuclear decay, radiation detection, structure and models of the nucleus. CRQ: PHYS 480.

583. NUCLEAR PHYSICS LABORATORY (2). The properties of particles from natural and artificial disintegration of nuclei; the corresponding measuring instruments. PRQ: PHYS 582 or consent of department.

584. NUCLEAR PHYSICS II (3). Particle accelerators, nuclear reactions, nuclear models, nuclear energy, elementary particles. PRQ: PHYS 582 or consent of department.

585. METHODS OF THEORETICAL PHYSICS I (3). Calculus of variation, integral equations, integral transforms, approximation methods. PRQ: PHYS 485 or consent of department.

592. SEMINAR ON COLLEGE TEACHING OF PHYSICS (2). Traditional and nontraditional methods for teaching physics at the college and community college level. Laboratory and demonstration apparatus will be discussed. Seminar participants may participate in teaching classes under the guidance of an experienced teacher. These semester hours may not be applied toward the hours required for a master's degree. PRQ: Consent of department.
599. MASTER'S THESIS (1-6). The individual investigation of a problem under the supervision of an adviser in the department. May be repeated to a maximum of 6 semester hours. PRQ: Consent of research supervisor and the department.

651. RELATIVITY (3). Lorentz transformations and kinematics of special relativity; relativistic dynamics and manifestly covariant electrodynamics; general relativity as a theory of gravitation. PRQ: PHYS 500 and PHYS 570 or consent of department.

660. QUANTUM MECHANICS III (3). Symmetry and invariance in quantum mechanics, field quantization, introductory quantum field theory. PRQ: PHYS 560 or consent of department.

668. QUANTUM THEORY OF SOLIDS (3). Space groups, lattice vibrational and electronic spectra of solids; elementary theory of the electron gas; effective mass theory, impurity states in metals and semiconductors. PRQ: PHYS 567 or consent of department.

676. HIGH ENERGY PHYSICS (3). Classification of particles into baryons, mesons, and leptons and their fundamental properties; symmetries and conservation laws. PRQ: PHYS 660 or consent of department.

686. FUNDAMENTAL PARTICLE THEORY (3). S-matrix theory; analyticity properties of propagators, vertex functions, and scattering amplitudes; single-variable dispersion theory. PRQ: PHYS 660 or consent of department.

690. SPECIAL TOPICS IN PHYSICS (1-6).
A. Solid State Physics
B. Nuclear Physics
C. Elementary Particle Physics
D. Other Topics of Current Interest
Lectures and discussions on topics in various fields of physics at the graduate level. One to 6 semester hours as scheduled; course may be repeated in one or more fields of physics. Six semester hours is the maximum in any one area; not more than 15 semester hours will count toward a master's degree. PRQ: Consent of department.

698. PHYSICS SEMINAR (1). Discussion of current problems in physics under guidance of staff.
Department of Political Science (POLs, PSPA)

Chair: Andrea Bonnicksen

Graduate Faculty

Robert B. Albritton, professor, Ph.D., Northwestern University
Larry Arnhart, professor, Ph.D., University of Chicago
James M. Banovetz, director, Division of Public Administration, professor, Ph.D., University of Minnesota
Andrea Bonnicksen, professor, Ph.D., Washington State University
Paul J. Cullhane, associate professor, Ph.D., Northwestern University
Martin D. Dubin, associate professor, Ph.D., Indiana University
Craig R. Ducat, professor, Presidential Teaching Professor, Ph.D., University of Minnesota
J. Dixon Esseks, professor, Ph.D., Harvard University
Morton J. Frisch, adjunct professor, Ph.D., Pennsylvania State University
Gerald T. Gabris, professor, Ph.D., University of Missouri
Daniel T. Gallagher, assistant professor, Ph.D., Boston College
Gary D. Glenn, professor, Ph.D., University of Chicago
Gordon T. Hilton, associate professor, Ph.D., Lancaster University (England)
Christopher M. Jones, assistant professor, Ph.D., Syracuse University
Lynn Kamenitsa, assistant professor, Ph.D., Indiana University
C. S. Eliot Kang, assistant professor, Ph.D., Yale University
Daniel R. Kempton, associate professor, Ph.D., University of Illinois
Dwight Y. King, director of graduate studies, associate professor, Ph.D., University of Chicago
Peter S. Ruckman, Jr., assistant professor, Ph.D., Florida State University
Irene S. Rubin, professor, Ph.D., University of Chicago
Peter S. Ruckman, Jr., assistant professor, Ph.D., Florida State University
Gregory Schmidt, associate professor, Ph.D., Cornell University
James N. Schubert, professor, Ph.D., University of Hawaii, Manoa
William R. Monat, adjunct professor, Ph.D., University of Minnesota
Michael T. Peddle, associate professor, Ph.D., Northwestern University
Bruce A. Rocheleau, associate professor, Ph.D., University of Florida
Mikel Wyckoff, associate professor, Ph.D., University of Maryland

The Department of Political Science offers graduate programs leading to the M.A., M.P.A., and Ph.D. degrees. Eight fields are available in political science: American government and politics, public law, public administration, public policy, political theory, comparative politics, international relations, and politics and the life sciences.

Graduate study may lead to careers in government service (federal, state, and local), international business, teaching, and professional writing and research. The public administration program offers professional preparation, including internship opportunities in government agencies as part of course work, toward a graduate degree; active efforts are made to place students in career government positions upon completion of their studies. Foreign study and overseas internship opportunities also exist. All programs are related to the students' career objectives by their departmental advisers.

Master of Arts in Political Science

Students interested in pursuing the M.A. in political science normally should have at least 9 undergraduate semester hours in political science or the equivalent. When this is lacking, a student may be required to make up deficiencies by enrolling in and successfully completing designated courses, by auditing designated courses, or by engaging in supervised reading without graduate credit.

Requirements

Of the minimum 30 semester hours of graduate credit required for the degree, at least 12 semester hours are to be taken in one of the fields listed above and 9 semester hours in another of the fields, or in one of the two designated areas of study: political economy and development, and urban studies.

Students may apply 3 semester hours to the writing of a thesis, and apply all 9 additional semester hours to graduate elective courses. No more than 3 semester hours may normally be applied to courses outside the department. If a thesis is to be written, the student must register for POLS 599, Thesis (1-6). Students not writing a thesis must submit and successfully defend two research papers prepared in graduate courses, one in each of the student's two fields. Prior to submission to the department for this purpose, each paper must be approved for such submission by the instructor for the course in which it was written.

No more than 9 semester hours in 400-level graduate courses may be included in the M.A. program. Normally a student will be required to take the core courses in the chosen fields of study.

An oral comprehensive examination is required upon completion of all course work, or during the last semester of study.

Master of Public Administration

The M.P.A. program is designed to meet the needs of those students seeking special educational preparation for careers in public service. It focuses principally on the dynamics of public policy formulation and public management as the appropriate basis for persons who wish to address political, social, economic, environmental, and administrative problems through career positions in governmental and quasi-public agencies.

Prerequisites for admission to the program are 9 semester hours in the social sciences, including at least one course in U.S. government, and appropriate undergraduate work in mathematics or statistics. With the approval of the student's adviser, a maximum combined total of 15 semester hours of graduate credit transferred from other accredited institutions plus graduate credit earned in courses at Northern Illinois University as a student-at-large may be counted toward meeting the requirements of the M.P.A. degree.
Requirements

The M.P.A. degree normally requires the completion of a minimum of 39 to 50 semester hours of approved graduate study which is to be undertaken in two fields, the public policy/management core, and a selected specialization.

In addition to credit-hour requirements, students must also develop a basic familiarity with the utilization of computers; submit a starred paper while registered for PSPA 599; and pass a comprehensive examination. The starred paper is a culminating research/analysis presentation, based on an approved research design and original field research, which is expected to be of professional, publishable quality. Students must have completed a minimum of 27 semester hours of approved graduate study, exclusive of internship courses; have maintained a GPA above 3.00; be carrying no “incompletes”; and have completed the starred paper to be eligible to sit for the comprehensive examination.

Public Policy/Management Core (24)

PSPA 500, Scope and Dynamics of Public Administration (3)
PSPA 501, Data Analysis in Public Administration (3)
PSPA 504, Public Program Evaluation Methods (3)
PSPA 505, Organization Theory and Behavior (3)
PSPA 509, Public Personnel Management (3)
PSPA 510, Public Budgeting and Financial Management (3)
PSPA 512, Information Management and Decision Support in Public Organizations (3)
PSPA 599, Public Sector Research (3)

Twelve semester hours of approved graduate study (12)
PSPA 595, Internship in Public Administration (1-3)

Specialization

Students must also complete the requirements of one of the following specializations, thus permitting the development of expertise in a particular field of academic and professional interest. Students will normally be expected to select elective courses from curricula other than public administration (PSPA) courses.

Specialization in Public Administration

A general study of public administration, focusing principally on organization theory, administrative analysis, and the problems endemic to large federal and state government agencies.

PSPA 420, American Public Administration (3)

Twelve semester hours of approved graduate study (12)
PSPA 595, Internship in Public Administration (1-3)

Specialization in Urban Management

An analysis of urban problems, especially the political and administrative problems of city management and community organization activities.

PSPA 530, Local and Metropolitan Government (3)
PSPA 531, Urban Planning and Zoning (3)

Nine additional semester hours of approved graduate study (9)

Specialization in Comparative and Developmental Administration

A thorough study of the economic and social problems of development administration, and an examination of bureaucratic functioning in other cultures.

PSPA 571, Readings in Comparative Public Administration (3)

Two of the following (6)
POLS 432, Public Administration in Southeast Asia (3)
POLS 521, Comparative Public Policy (3)
POLS 533, International Biotechnology Policy (3)
POLS 568, Seminar in the Political Economy of Developing Areas (3)
POLS 584, Political Economy of International Relations (1-3)
PSPA 571, Readings in Comparative Public Administration (3)
PSPA 572, Administrative Problems of Less Developed Countries (3)

Six additional semester hours of approved graduate study (6)

Specialization in Fiscal Administration

The critical examination of techniques and problems in the areas of fiscal management, accountancy, budgetary policy, and political economy.

ACCY 557, Accounting for Public Administration (3)
PSPA 552, Public Sector Revenue Management (3)

Nine semester hours of approved graduate study (9)
PSPA 595, Internship in Public Administration (1-3)

Specialization in Human Services Administration

An intensive review of fundamental problems involved in the development and administration of programs in social services, mental health, developmental disabilities, health planning, workforce planning, aging, youth services, and related topics.

PSPA 526, Social Policy (3)

Twelve semester hours of approved graduate study (12)
PSPA 595, Internship in Public Administration (1-3)

Doctor of Philosophy in Political Science

While the Ph.D. in political science has traditionally been the badge of distinction of college and university teachers, doctoral programs in political science are also designed with other career objectives in mind such as professional research, public service, and university administration. The Department of Political Science is conscious of these several career objectives.

Admission

An applicant may be admitted to the Ph.D. program without a prior degree in political science or public administration if the discipline of the prior degree(s) is relevant to his or her primary fields of doctoral study. If the applicant has not completed a prior degree in political science or public administration, he or she must have completed the equivalent of 9 semester hours of undergraduate political science course work or the department may require that introductory political science courses appropriate to his or her fields of study be taken as a condition of admission.

An applicant to the Ph.D. program in political science is usually expected to have completed both a baccalaureate and an M.A. degree; however, an individual with a baccalaureate degree may be admitted directly into the Ph.D. program. Such an applicant must have GRE scores, strong letters of recommendation, and an undergraduate record which present conclusive evidence of an ability to begin high quality work at the doctoral level immediately.

Students with a baccalaureate degree who are admitted directly into the Ph.D. program must complete all requirements for the

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1The requirement for PSPA 595 may be waived if a student has had appropriate professional experience.

2If not counted above.
The Department of Political Science offers two options: (1) three fields and (2) two fields and one area of study. (An area of study is an interdisciplinary area of inquiry.) For both options the Department of Political Science requires that 90 semester hours of graduate course work be completed with a cumulative average of B or higher. These hours may include no more than 30 semester hours of credit in POLS 699, Doctoral Research and Dissertation (1-15).

In completing the remaining required 60 seminar hours of course work, students must include POLS 502, Scope and Methods of Political Science I (3), and POLS 503, Scope and Methods of Political Science II (3). Students who have not completed the scope and methods sequence prior to entering the Ph.D. program should do so in their first year of doctoral studies. Students with a field in public administration or public policy may substitute SPSP 504 for POLS 502 with the approval of their advisory committee.

The fields offered by the department are American government and politics, public law, public administration, public policy, political theory, comparative politics, international relations, and politics and the life sciences. Course work is also available in political economy.

Graduate students in the doctoral program must take comprehensive written and oral examinations (candidacy examinations) either in three fields of the discipline or in two fields and one area of study.

**Option 1: Three fields.** The student must complete 12 to 18 semester hours of course work in each field. Each student must designate one field as a primary field; course work in that field shall normally be greater than in the other two. Each student must take at least one 600-level seminar in the field of the dissertation. Students who take only 12 semester hours in any field may not count any independent study courses in those 12 hours. No more than one 500-level course may be counted toward the hours required in any one field. More than 15 semester hours may be taken outside of political science. Petitions for exceptions to any of these rules must be submitted in writing to the department graduate committee through the student's advisory committee.

**Option 2: Two fields and one area of study.** The student must complete 12 to 18 semester hours of course work in each of two fields. Each student shall designate one field as a primary field; course work in that field shall normally be greater than in the other field. In addition, the student shall complete one area of study in lieu of the third field. An area of study requires a minimum of 12 to 18 semester hours, and must include at least 9 semester hours outside of the two fields the student has otherwise chosen. The two designated areas of study (political economy and development, and urban studies) need only include 6 semester hours outside the fields the student has otherwise chosen. Courses in the area of study may not count toward completion of course requirements in the other two fields. Each student shall take at least one 600-level seminar in the field of the dissertation. Students who take only 12 semester hours in any field or area of study may not count any independent study courses in those 12 hours. Students may take one course in each of their two fields outside of political science. Up to a total of 15 semester hours in the two fields and one area of study may be taken outside of political science. An area of study must be formed by the student and approved by his or her academic committee as well as the department graduate committee. Students choosing this option must take a comprehensive examination in the area of study in addition to comprehensive examinations in the other two fields.

Students in both options will be expected to consult initially with an interim adviser, and subsequently with members of the advisory committee, once these have been appointed, regarding a program of studies. Such consultation will help to ensure that the student's doctoral work is related to career and professional interests, and conforms to Graduate School and departmental requirements. Registration for courses without the adviser's approval might lead to the accumulation of graduate credits in political science and related disciplines, but provides no assurance that the department will support an application for admission to candidacy for the Ph.D.

**Teaching-Skill Requirement**

All students in the Ph.D. program will be required to participate in a training program in classroom techniques. Ordinarily, the requirement will be met through direct involvement in the instructional program for at least one semester under the close supervision of a faculty member.

**Language/Research-Tool Requirement**

The student working toward a Ph.D. in political science must demonstrate an ability to make use of research tools by showing proficiency in using the language and/or quantitative research tools. The choice of research tools will relate to the student's fields of study, and will be made in consultation with the members of the student's advisory committee. Proficiency is normally demonstrated by passing a special written examination in foreign languages, or, in the case of other research tools, by successfully completing designated courses with a grade of A or B. In certain cases, a student's committee may approve the use of a proficiency examination in lieu of course requirements for the research tool. Any one of the following will satisfy the language/research-tool requirement.

- Two foreign languages, average reading proficiency
- One foreign language, high level of reading proficiency
- One foreign language, average reading proficiency, and one research tool, average proficiency
- Two research tools, average proficiency
- One research tool, high level of proficiency

The language/research-tool requirement must be completed before the student takes doctoral candidacy examinations, unless the department grants an exception.

**Candidacy Examinations**

The student will take a candidacy examination after completing most or all of his or her course work, and not later than eight months before the granting of the Ph.D. in political science. Written candidacy examinations will be administered in each of three fields and/or area of study in a student's program, followed by an oral examination. A student who successfully completes this requirement will be recommended to the Graduate School for admission to candidacy for the doctorate in political science. Any student who fails the candidacy examination may, with the permission of the examining committee and after the lapse of at least one semester, repeat the examination. A student who fails the candidacy examination a second time will not be permitted to continue work toward the doctorate in the Department of Political Science.

**Course List**

**Political Science (POLS)**

**Course numbering system.** Many courses offered by the department relate to more than one field of political science. However, as a general guide to students, the following numbering system is used.

- 00 to –09, American government
- 10 to –19, public law
- 20 to –29, public policy
- 30 to –39, politics and the life sciences
- 40 to –49, political theory
- 50 to –59, international relations
- 60 to –79, comparative politics
- 80 to –89, international relations

The following numbers are for courses not in any of the above fields.

- 40 to –49, methodology
- 90 to –99, general
403. INTEREST GROUPS IN AMERICAN POLITICS (3). Examines the growing influence of interest groups in American politics including the roles of major economic interest groups, the emergence of political action committees, the involvement of interest groups in campaign financing, personnel recruitment for the executive branch, and direct lobbying. PRQ: POLS 305 or consent of department.

404. COMPARATIVE STATE POLITICS (3). An intensive examination of the formal structure, political dynamics, and policy outputs of state governmental systems. Emphasis on the use of the comparative approach.

405. URBAN POLITICAL BEHAVIOR (3). The organization, conduct, and problems of politics in American urban government. PRQ: POLS 100 or consent of department. Recommended: POLS 303.

407. POLITICAL ATTITUDE AND VALUE FORMATION (3). Formation, transmission, maintenance, and change of political attitudes. Topics include strategies for the conceptualization and measurement of attitudes and major theories of attitude change. PRQ: POLS 340 or consent of department. Recommended: POLS 304.

408. POLITICAL PARTICIPATION AND BEHAVIOR (3). Focuses on the structural, psychological, and sociological factors associated with participation in the political process. Both electoral and non-electoral participation will be studied. Attention will be directed to the impact of various levels and types of participation on the American and other major political systems. PRQ: POLS 407 or consent of department.

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, and the Supreme Court and economic policy. PRQ: POLS 407 or consent of department.

411. CONSTITUTIONAL LAW II (3). Economic liberties and property rights, equal protection of the law, due process, incorporation of the Bill of Rights, right to counsel, right against compelled self-incrimination, right against cruel and unusual punishment, and right against unreasonable searches and seizures. PRQ: POLS 407 or consent of department.

412. CONSTITUTIONAL LAW III (3). The First Amendment: freedoms of speech, association, assembly, press, and religion, and the right to privacy. PRQ: POLS 407 or consent of department.

414. TOPICS IN LAW AND SOCIAL PROBLEMS (3). Examination and analysis of the enduring questions of importance for the legal system. Problems illustrating the intersection of law, morality, and politics are set in the context of contemporary issues. Specific focus of the course changes each semester. May be repeated once as topic changes. PRQ: POLS 340 or consent of department.

415. CRIMINAL LAW (3). Course focuses on substantive criminal law: functions of the criminal law, crimes against the person, crimes against property, attempt, conspiracy, solicitation, and crimes without victims. Course may also touch upon elements of criminal procedures.

426. AGING, POLITICS, AND PUBLIC POLICY (3). This course examines the role that aging plays in politics and policy. Attention is given to impact of the aging on elections and other aspects of the political process. Also examined are the relationships between aging and major programs such as Social Security, Medicare, and others.

432. PUBLIC ADMINISTRATION IN SOUTHEAST ASIA (3). An examination of public administration in selected Southeast Asian countries; includes an analysis of the various factors which condition the operation of these administrative systems, a study of the major ingredients in each, and an appraisal of how well they function in terms of development programs as well as traditional activities.

439. INTERNSHIP IN ADMINISTRATION (3). Admission upon written departmental approval. Two days a week or equivalent in a government agency. The only grades awarded are S, U, or I. Recommended: POLS 331.

440. MAJOR MODES OF EMPIRICAL THEORY (3). Selected major empirical theoretical approaches: institutional analyses, the role of elites, systems and communications networks, game theory, decision making, and phenomenology. PRQ: POLS 340 or consent of department.

450. AMERICAN POLITICAL THOUGHT I (3). An analysis of the political thought of selected American statesmen and stateswomen having political responsibility at the critical moments in American history. Particular attention is given to the relationship between the political philosophy in their thinking and the political actions which they initiated.

451. AMERICAN POLITICAL THOUGHT II (3). Analysis of topics in American political thought which reflect major political controversies in American history: for example, liberty and equality, liberalism and conservatism, American political rhetoric. Topics change each semester. May be repeated to a maximum of 6 hours.

452. RELIGION AND THE CONSTITUTION (3). Examines the constitutional relation of religion and American politics in light of modern political philosophy, the Founders' political thought, and historical and contemporary constitutional controversies involving religion.

456. WAR, EMPIRE, AND ETHICS (3). Examines questions of justice and interest as they arise in the context of war and imperial politics. Study of views of political philosophers, historians, and political leaders. Representative authors include Thucydides, Machiavelli, Kant, and Churchill. PRQ: Consent of department.

460. COMPARATIVE COMMUNIST POLITICAL SYSTEMS (3). Analysis of the political processes and institutions of contemporary communist states and an evaluation of the theoretical methods appropriate to such a study. Recommended: POLS 260.

469. POLITICS OF SOUTH AMERICA (3). Comparative analysis of politics and government in major South American states, with emphasis on alternative interpretations and contemporary political and policy issues. Recommended: POLS 260 or POLS 381.


482. FOREIGN POLICIES OF THE WESTERN EUROPEAN POWERS (3). Contemporary external policies of France, the Federal Republic of Germany, the United Kingdom, and the European Community.

484. INTERNATIONAL RELATIONS IN EAST ASIA (3). The international politics of "power and plenty" in East Asia. Examines the political and economic interactions of China, Japan, and Korea with other nations.

493X. SEMINAR IN POLITICAL ECONOMY (3). ECON 493

A. Decision Making in the Public Sector
B. International Relations
C. Metropolitan Studies
D. Human Resources and Training Policy

Selected topics in political economy, offered jointly by the Departments of Political Science and Economics. Topics will be listed by semester. Each lettered topic may be taken once. PRQ: 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.

496X. MATERIALS AND PROBLEMS OF HIGH SCHOOL INSTRUCTION IN THE SOCIAL SCIENCES (3). HIST 496. Must be taken by students seeking certification in a social science before student teaching. Includes 15 clock hours of clinical experience, attention to the teaching of exceptional students, planning for multicultural learning situations, and techniques of reading in the social sciences. PRQ: Consent of department.

498. SEMINAR ABROAD (3-9). A foreign study program to be arranged with the department chair.

501. TOPICS IN AMERICAN POLITICS (3). A reading seminar which in any one semester will focus on either the American Experience, comparative state politics, government and the economic system, or some other topic in American politics. May be repeated to a maximum of 6 semester hours as topic changes.

502. SCOPE AND METHODS OF POLITICAL SCIENCE I (3). Survey of research methods and design in political science. Required in the first year for all students in the Ph.D. program and strongly recommended for all M.A. students planning to pursue a Ph.D.

503. SCOPE AND METHODS OF POLITICAL SCIENCE II (3). Social science theories of knowledge and orientation to the discipline of political science. Required of all students in the M.A. and/or Ph.D. programs. Not required for M.P.A. students.

505. SEMINAR IN POLITICAL PARTIES (3). Survey of the literature and research pertaining to American political parties.
506. INTERGOVERNMENTAL RELATIONS (3). An analysis of national-state, national-local, state-local, interstate, and interlocal relationships within the United States. The nature of federalism, constitutional and statutory power bases, and cooperative problem-solving.

507. URBAN POLITICS (3). The theory of urban politics with emphasis on urban research design.

508. LEGISLATIVE BEHAVIOR (3). Functioning of legislative bodies, actions of members, coalitions, policy outputs, decision processes, and constituency relationships.

509. THE ROOTS OF POLITICAL BEHAVIOR (3). An examination of the foundations of political behavior of individuals and groups; a survey of the research methods used to study such behavior. May be repeated for a total of 6 semester hours.

510. SEMINAR IN THE JUDICIAL PROCESS (3). Judicial systems and roles, judicial selection, organization and management of litigation, influences on judicial decision-making, impact and enforcement of judicial decisions, relationships among courts and other policy makers in the political system.

511. THE COURTS AND ADMINISTRATIVE POLICY (3). Basic principles of law that characterize the relationship between courts and administrative agencies. Impact of attempts to judicialize administrative policymaking. Judicial impact on policy formation by various local, state, and federal agencies.

512. CONSTITUTIONAL POLITICS (3). Relationship between doctrines of constitutional law and the political values of prevailing coalitions on the U.S. Supreme Court. Attention given to selected cases.

518. THEORIES OF LEGAL JUSTIFICATION (3). Alternative frameworks for the justification of judicial decisions.

519. TOPICS IN PUBLIC LAW (3). Selected topics in public law. May be repeated to a maximum of 6 semester hours.

520. STUDY OF PUBLIC POLICY (3). A survey of the theoretical approaches to public policymaking rooted in the fields of American politics, public administration, and urban politics. Required for advanced graduate work in public policy.

521. COMPARATIVE PUBLIC POLICY (3). Comparative analysis of the policies of both developed and developing nations in the areas of budgetary, development, foreign, military, and social welfare policies.

522. COLLECTIVE PUBLIC CHOICE: ECONOMIC AND SOCIAL POLICIES (3). Intended to provide a basic understanding of recent developments in the study of political economy. Such models will be applied to the study of selected issues in current social and economic policy making and policy evaluation in the United States.

524. NATURAL RESOURCES POLICY (3). Policymaking and political management regarding environmental issues such as pollution regulation, water resources development, and environmental impact assessment. Enrollment open to students in both natural and social sciences.

526. HEALTH POLICY (3). An examination of political issues relating to the allocation and rationing of health resources in democratic and other societies. Health policies and case studies of governmental decision making will be examined.

529. TOPICS IN PUBLIC POLICY (3). Selected issues concerning public policymaking in the U.S. and/or other nations. May be repeated to a maximum of 9 semester hours as the topic changes.

530. BIOPOLITICAL THEORY (3). History, approaches, problems, and critiques of biopolitics.

531. BIOMEDICAL POLICY (3). Detailed examination of state and federal government policies related to biomedical issues. Emphasis on policies relating to human genetics (counseling, screening, therapy), reproductive technologies, and organ transplantation. PRQ: Consent of department.

532. BIOTECHNOLOGY AND POLITICAL STRUCTURES (3). Intensive examination of the role of the executive, legislative, and judicial branches of government in the regulation of biotechnology research and development. Exploration of questions of industry-academic relations in biotechnology.

533. INTERNATIONAL BIOTECHNOLOGY POLICY (3). An examination of the social and political implications of developments in biotechnology for international relations. Topics to be addressed include international regulatory, economic, and legal issues in biotechnology as well as the uses of biotechnology in terrorism and warfare.

537. EVOLUTION AND POLITICAL THEORY (3). Theoretical and methodological problems in biopolitical studies with particular attention to the political implications of Darwinian evolution, ethology, and sociobiology. PRQ: Consent of department.

541. INTRODUCTORY ANALYSIS OF POLITICAL DATA (3). Consideration of basic concepts in data analysis and statistics such as central tendency, dispersion, probability, confidence intervals, statistical significance, correlation, and bivariate regression.

542. INTERMEDIATE ANALYSIS OF POLITICAL DATA (3). Regression analysis techniques in political research. Simple bivariate statistical models through structural modeling. PRQ: POLS 340 or POLS 541, or consent of department.

543. ADVANCED ANALYSIS OF POLITICAL DATA I (3). Review and application of general linear techniques to the analysis of political data; examination of applications of this model in special cases: binary dependent variables (logistic regression) and time series analysis, including the use of ARIMA modeling. PRQ: POLS 542 or consent of department.

544. ADVANCED ANALYSIS OF POLITICAL DATA II (3). Basic instruction for using factor analysis, path analysis/structural equation modeling with observed variables, the incorporation of multiple indicators and measurement error into structural equations, and the assessment of model identification, fit, and modification. Considerable use of specialized computer packages in SPSS (LISREL) and others. PRQ: POLS 542 or consent of department.

545. QUALITATIVE RESEARCH METHODS (3). Examines the philosophical underpinnings and rigorous design of qualitative research in political science, with emphasis on giving students sufficient skills to do qualitative research. Topics include selecting and defining cases, structuring qualitative interviews, coding and analyzing qualitative data, and generalizability. Techniques and applications include participant observation, case studies, elite interviews, and oral histories.

550. BASIC PROBLEMS IN ANCIENT POLITICAL PHILOSOPHY (3). An analysis of a major work or major works of classical political philosophy. May be repeated to a maximum of 12 semester hours as topic changes.

551. TOPICS IN MODERN POLITICAL PHILOSOPHY (3). An analysis of a major work or major works illustrative of modern political philosophy. May be repeated to a maximum of 15 semester hours as topic changes.

552. THEORY OF AMERICAN DEMOCRACY I: THE FEDERALIST (3). A theoretical consideration of the American political order as it is revealed in its founding decade. Primary attention is given to "The Federalist," as supplemented by "The Federalist Convention" by the Federalist and related philosophical and historical materials.

553. THEORY OF AMERICAN DEMOCRACY II: THE FEDERALIST (3). A theoretical consideration of the American political order as it is revealed in the founding decade. Primary attention is given to "The Federalist" as a work of political philosophy, to the Anti-Federalist writings, and to related philosophical and historical materials.

554. PRINCIPLES OF PLATO'S POLITICAL THEORY (3). An analysis of Plato's political dialogues. May be repeated to a maximum of 6 semester hours for different dialogues.

560. SEMINAR IN COMPARATIVE POLITICAL ANALYSIS (3). Reading seminar in the major theoretical and methodological concerns of the field of comparative government. Required for advanced graduate work in comparative government.

562. SEMINAR IN POLITICAL CULTURE (3). An analysis of politics as a cultural manifestation; comparative analysis of the cultural bases of national political systems. Research on selected topics of political culture.

563. POLITICAL ECONOMY OF THE COMMUNIST WORLD (3). Interaction of communist politics with economic structures and constraints. PRQ: Consent of department.

566. SOVIET POLITICS AND GOVERNMENT (3). An examination of key factors influencing the origins, development, current institutions, policies, and practices of the Soviet political order, including the relevant theories from totalitarianism onward. PRQ: Consent of department.

567. SEMINAR IN POLITICAL DEVELOPMENT (3). A reading seminar devoted to a comprehensive survey of the literature on the problems of political development and social modernization in the developing nations.
568. SEMINAR IN THE POLITICAL ECONOMY OF DEVELOPING AREAS (3). The seminar will examine the political determinants and consequences of economic development programs in underdeveloped nations. Special attention will be given to the politics of the planning process, the internal impact of foreign assistance, the politicization of economic conflict, and the evolution of public policy in selected developing countries.

569. THE POLITICS OF ECONOMIC POLICY IN INDUSTRIALIZED COUNTRIES (3). Special attention will be given to various forms of planning, regulation, participation, and industrial relations in industrialized countries, including the U.S., USSR, Japan, and selected European countries.

570. READING SEMINAR IN SOUTHEAST ASIAN POLITICS (3). An examination of the literature concerning the diverse political cultures of Southeast Asia, the influence of political forces, and the major political problems of development, integration, and stability in the area.

573. FOREIGN AREA POLITICS (3).
A. India and Pakistan
B. Africa
C. The Middle East
D. East Asia
E. Western Europe
F. Latin America
G. Communist Political Systems
H. Thailand
I. Indonesia

Each of these seminars will focus on political institutions, processes, behaviors, and the impact of sociocultural change in the area of concern. May be repeated to a maximum of 9 semester hours; however, individual topics may not be repeated.

575. SEMINAR IN COMPARATIVE POLITICAL INSTITUTIONS AND PROCESSES (3). An examination of the political culture and political systems of different regions and countries in comparison with the United States. May be repeated to a maximum of 9 semester hours, which may be counted toward the 90 semester hours required for a master's degree, and is not normally accepted toward field requirements for the Ph.D. degree. May be repeated to a maximum of 9 semester hours, which may be counted toward the 90 hours required for the Ph.D. degree. S/U grading. (POLS 591Y is required for all Ph.D. students and may not be taken for only 1 semester hour and may not be repeated for credit.) PRQ: Consent of department.

586. SEMINAR IN INTERNATIONAL RELATIONS (3). Research and analysis of selected topics or selected world regions in the field of international relations.

587. SOUTHEAST ASIA AND INTERNATIONAL POLITICS (3). An examination of Southeast Asia's role in contemporary international politics with emphasis on conflict and cooperation among neighboring states, commitment vs. neutrality in the cold war, and participation in international organizations.

589. THEORY AND INTERNATIONAL RELATIONS: SUBSYSTEMIC ANALYSIS (1-3). The political aspects of theories below the systemic level that describe international behavior including communications, small-group, decision-making, frustration-aggression, and biological theories as they relate to international political processes. May be repeated to a maximum of 3 semester hours.

591. SEMINAR IN COLLEGE TEACHING OF POLITICAL SCIENCE (1-3).
A. American Government
B. Public Law
C. Public Administration

E. Political Theory
J. Comparative Politics
K. International Relations
M. Politics and the Life Sciences
N. Public Policy
Y. Orientation to Teaching Political Science

Open to graduate teaching interns in political science as an integral part of the college teaching intern program. This credit may not be applied toward the hours required for a master's degree, and is not normally accepted toward field requirements for the Ph.D. degree. May be repeated to a maximum of 9 semester hours, which may be counted toward the 90 hours required for the Ph.D. degree. S/U grading. (POL 591Y is required for all Ph.D. students and may not be taken for only 1 semester hour and may not be repeated for credit.) PRQ: Consent of department.

598. INDEPENDENT STUDY IN POLITICAL SCIENCE (1-6). Open to qualified master's students who wish to do individual advanced work in political science. May be repeated to a maximum of 9 semester hours.

599. THESIS (1-6). May be repeated to a maximum of 6 semester hours.

600. RESEARCH SEMINAR IN POLITICAL SCIENCE (3).
A. American Government
B. Public Law
C. Political Theory
D. Comparative Politics
E. International Relations
F. Politics and the Life Sciences
G. Public Policy

With the consent of the student's adviser and the director of graduate studies, the 600-level seminars may be repeated to a maximum of 9 semester hours each.

698. FOREIGN STUDY AND INTERNSHIP (3-9). Individual research, study, and work abroad.

699. DOCTORAL RESEARCH AND DISSERTATION (1-15). May be repeated to a maximum of 30 semester hours.

Public Administration (PSPA)

420. AMERICAN PUBLIC POLICY (3). Foundation, design, implementation, and evaluation of American public policy at federal, state, and local levels. PRQ: POLS 100 or consent of department.

500. SCOPE AND DYNAMICS OF PUBLIC ADMINISTRATION (3). Examines the history of public administration and the basic issues which confront it including administrative responsibility and ethics, and the formulation and implementation of public policy.

501. DATA ANALYSIS IN PUBLIC ADMINISTRATION (3). Examines techniques for the collection, manipulation, interpretation, and presentation of data and information in public policy/management processes, and demonstrates applications of the techniques using microcomputer technology.

504. PUBLIC PROGRAM EVALUATION METHODS (3). An examination of the techniques of evaluation and their application to selected policy areas, including a discussion of experimental, quasi-experimental, and other evaluative tools. Requires design of a research project. PRQ: PSPA 501 or consent of department.

505. ORGANIZATION THEORY AND BEHAVIOR (3). A survey of theory and research on organizations relevant to public administration, with a focus on key organizational functions and ways of defining and responding to organizational problems. PRQ: PSPA 501 or consent of department.

509. PUBLIC PERSONNEL MANAGEMENT (3). An examination of techniques, methods, and policies concerning the management of personnel in public and quasi-public organizations.

510. PUBLIC BUDGETING AND FINANCIAL MANAGEMENT (3). Examination of the public budgetary process and related financial management techniques.

512. INFORMATION MANAGEMENT AND DECISION SUPPORT IN PUBLIC ORGANIZATIONS (3). An introduction to concepts and skills concerning the management of information technology in the public sector. Coverage of topics related to managing computers and using software (including spreadsheets and data base management systems) to support the decision making process. PRQ: PSPA 501 or consent of department. Recommended PRQ: PSPA 505.
526. SOCIAL POLICY (3). Introduction to the policies related to the delivery of social services in the United States, including such service systems as income maintenance, personal social services, housing, health care, disability policy, and employment and training policy. Emphasis on policy analysis, planning, community organization, and administration of social programs.

527. TOPICS IN HEALTH AND MENTAL HEALTH ADMINISTRATION (3). A. The Politics of Mental Health B. Clinical Administration: Treatment through Institutional Change C. Planning and Policy Making in Health and Mental Health D. Mental Health Administration An examination of political and administrative aspects of organizing, maintaining, and delivering health and mental health services.

530. LOCAL AND METROPOLITAN GOVERNMENT (3). Discussion of the operational and administrative aspects of local and metropolitan government in the United States, including design and structure, municipal law, finance, administrative organization, local political systems, and intergovernmental relations.

531. URBAN PLANNING AND ZONING (3). The basic theory, techniques, and practice of modern urban planning and land use regulation; current trends and problems; social, political, and economic characteristics of urban, suburban, and metropolitan political systems.

532. PROBLEMS OF MUNICIPAL ADMINISTRATION (3). The administration of local government introduction to the tools, institutions, analytical techniques, financing instruments, and policy issues relevant to economic development policy at the state, local, and regional level.

535. LOCAL ECONOMIC DEVELOPMENT POLICY (3). Introduction to the tools, institutions, analytical techniques, financing instruments, and policy issues relevant to economic development policy at the state, local, and regional level.

552. PUBLIC SECTOR REVENUE MANAGEMENT (3). Investigation of theories and politics of taxation, impacts of alternative taxes, fiscal federalism, mechanisms of raising funds, macroeconomic impacts, and principles of municipal investment. PRQ: PSPA 510 or consent of department.

554. INFORMATION SYSTEMS AND GOVERNMENT (3). An examination of management issues, innovative applications, and research involving information systems and government. Covers topics such as geographic information systems, expert systems, pert/cpm software, and political and legal issues involved in public information systems. PRQ: PSPA 510 or consent of department.

555. ORGANIZATION DEVELOPMENT IN THE PUBLIC SECTOR (3). Examines the theoretical basis of organization development (OD) and total quality management (TQM). Demonstrates how OD and TQM technologies can be applied to public sector organizations for improving program quality and performance.

556. MANAGEMENT OF NOT-FOR-PROFIT AGENCIES (3). A comprehensive study of the not-for-profit organization as an integrated and complex model. Examines not-for-profit management principles and objectives, program services, planning, resource development and fund raising, volunteer development, and public relations.

558. LABOR-MANAGEMENT RELATIONS IN THE PUBLIC SECTOR (3). Federal, state, and local government employee-management relations with emphasis on legislative, judicial, political, and social considerations. Special attention is given to selected occupational groups such as police and fire in the public sector. Comparisons with the private sector and the special bargaining problems of various units in the public sector are considered.

559. TOPICS IN PUBLIC ADMINISTRATION (3). Selected issues concerning the policy and administrative processes of public organizations. May be repeated to a maximum of 9 semester hours as the topic changes.

561. THEORY AND ANALYSIS IN PUBLIC ADMINISTRATION (3). An examination of the major theoretical and conceptual concerns of public administration as a field of academic inquiry. Required for advanced graduate work in the field leading to the M.A. or Ph.D. degree. Not available to candidates for the M.P.A. degree.
Department of Psychology (PSYC)

Chair: Frederick M. Schwantes

Graduate Faculty

Gary D. Coover, assistant chair, professor, Ph.D., University of Oregon
James W. Corwin, associate professor, Ph.D., University of Kentucky
Raymond Dittrichs, associate professor, Ph.D., University of Iowa
William A. Falls, assistant professor, Ph.D., Yale University
Lisa M. Finkelstein, assistant professor, Ph.D., Tulane University
Steven R. Gold, professor, Ph.D., Purdue University
Joseph E. Grush, professor, Ph.D., University of Illinois
Peter M. Gutierrez, assistant professor, Ph.D., University of Michigan
Wayne A. Hershberger, professor, Ph.D., University of Colorado
Martin F. Kaplan, professor, Distinguished Research Professor, Ph.D., University of Pennsylvania
Howard Lavine, professor, Ph.D., University of Iowa
Mary C. Lovejoy, assistant professor, Ph.D., University of Iowa
Joseph P. Magliano, assistant professor, Ph.D., University of Minnesota
Randall B. Martin, professor, Ph.D., Syracuse University
Elise F. Masur, associate professor, Ph.D., University of Minnesota
Thomas R. McCann, professor, Ph.D., Ohio State University
Charles E. Miller, professor, Ph.D., University of Michigan
Keith K. Millis, associate professor, Ph.D., Memphis State University
Joel S. Milner, professor, Distinguished Research Professor, Ph.D., Oklahoma State University
George A. Neuman, assistant professor, Ph.D., Illinois Institute of Technology
Christopher P. Parker, assistant professor, Ph.D., Rice University
Bradford H. Pillow, assistant professor, Ph.D., Stanford University
Kimberly K. Powlishta, assistant professor, Ph.D., Stanford University
Frederick M. Schwantes, professor, Ph.D., University of Iowa
David P. Valentiner, assistant professor, Ph.D., University of Texas
Karen J. White, assistant professor, Ph.D., Florida State University
James F. Willott, professor, Distinguished Research Professor, Ph.D., University of California, Davis

The Department of Psychology offers programs leading to the M.A. and Ph.D. degrees. Preference will be given to applicants who show potential for doctoral work. The department offers a continuous program leading to the doctorate and the master's thesis is regarded as a part of this training. An entitlement program is offered in psychology, the GRE scores (General Test Package #1, verbal, quantitative, analytic, and writing), and letters of recommendation. An attempt is made to select the best applicants on a combination of indexes, recognizing that no index is absolute. While there are no minimum requirements, applicants should have a GPA of at least 3.00 (on a 4.00 scale) during the last two years of undergraduate work and a combined verbal-quantitative-analytic score of at least 1750 on the General Test Package #1 of the GRE in order to be competitive. Exceptions may be made under special conditions.

Admission

In considering applicants for admission to its graduate programs, the department evaluates the general undergraduate GPA, preparation in undergraduate psychology courses, background in science and mathematics, GRE scores (General Test Package #1, verbal, quantitative, analytic, and writing), and letters of recommendation. An attempt is made to select the best applicants on a combination of indexes, recognizing that no index is absolute. While there are no minimum requirements, applicants should have a GPA of at least 3.00 (on a 4.00 scale) during the last two years of undergraduate work and a combined verbal-quantitative-analytic score of at least 1750 on the General Test Package #1 of the GRE in order to be competitive. Exceptions may be made under special conditions.

Master of Arts in Psychology

The M.A. degree program in psychology requires a minimum of 30 semester hours in psychology. The total combined number of semester hours of graduate transfer credit plus graduate credit earned at NIU as a student-at-large which can be applied toward the M.A. degree may not exceed 15.

Course Requirements

PSYC 504, Advanced Psychological Statistics (3)
PSYC 506, Experimental Design (3)
Three of the following (9)
PSYC 501, Fundamentals of Learning (3), OR PSYC 511T, Cognitive Psychology I (3)
PSYC 503, Biopsychology (3)
PSYC 520, Experimental Social Psychology (3)
PSYC 541, Clinical Psychology II: The Analysis of Behavior Pathology (3)
PSYC 565, Behavioral Development (3)
PSYC 504 and PSYC 506 must be completed during the first calendar year and the remaining course requirements must be completed by the end of the second calendar year.

PSYC 590, Psychological Research (1-3), must be taken each fall and spring semester. These hours will not count toward the 30 semester hours required for the master's degree.

Registration for a minimum of 12 semester hours is required each fall and spring semester unless granted permission for a reduced load by the department chair or a leave of absence is obtained from the department chair and the office of the dean of the Graduate School. Registration for fewer than 12 semester hours without permission may result in termination from the program.

In addition, 15 semester hours must be completed in either the thesis or non-thesis option.

Thesis Option

PSYC 599, Master's Thesis (6), and other courses in psychology determined by the student and adviser (9)

Non-Thesis Option

Other courses in psychology determined by the student and adviser (15). Students electing the non-thesis option will not be considered for admission to the doctoral program.
Other Requirements
Students in the M.A. program must maintain at least a 3.00 GPA in graduate psychology courses exclusive of thesis and independent study courses. Failure to meet this requirement will result in academic probation for one semester following which the GPA must be at least 3.00 or the student will be removed from the program.

The student must successfully complete a master's comprehensive examination.

Other special requirements may be determined by the department and the curricular area in which the student chooses to study. The student is responsible for obtaining the Psychology Department Graduate Student Manual and for complying with the regulations in that manual.

Doctor of Philosophy in Psychology
The Ph.D. program in psychology is built around the areas of clinical psychology, cognitive-instructional-developmental-school psychology, neuroscience and behavior, and social and organizational psychology. All four areas place strong emphasis on research, teaching, and the development of appropriate applied skills.

The curriculum is designed to fulfill several purposes: development of knowledge of methodologies; acquaintance with basic literature; integration of course work, research experience, and practical experience; in-depth understanding in at least one area; and study in related fields when appropriate.

Requirements
As a part of the doctoral program a student must complete a master's degree in psychology with at least a 3.20 GPA in graduate psychology courses exclusive of thesis and independent study courses, including at least a 3.00 GPA in the master's foundation courses and an acceptable research thesis. Continuation in the doctoral program is subject to a recommendation from the department upon completion of the M.A. degree. Students entering NIU with a master's degree in psychology from another institution must complete the master's foundation courses. With departmental approval, students with adequate background may be exempted from individual courses.

The student must complete 90 semester hours beyond the baccalaureate degree, including at least 75 semester hours in psychology. Exceptions to the 75-hour requirement may be granted with the consent of the curricular area faculty and approval of the department chair. The total number of semester hours of graduate credit earned at NIU as a student-at-large which can be applied toward the Ph.D. degree may not exceed 15. The total combined number of semester hours of graduate transfer credit plus graduate credit earned at NIU as a student-at-large which can be applied toward the Ph.D. degree may not exceed 45 semester hours beyond the baccalaureate degree.

A minimum of 30 semester hours of graduate course work beyond the master's degree in psychology, exclusive of dissertation, must be completed in the Department of Psychology at NIU.

Registration in PSYC 590, Psychological Research (1-3), each fall and spring semester prior to approval of the dissertation proposal is required. These hours will not count toward the 90 semester hours required for the Ph.D.

The student must register for a minimum of 12 semester hours each fall and spring semester unless granted permission for a reduced load by the department chair or a leave of absence is obtained from the department chair and the office of the dean of the Graduate School. Registration for fewer than 12 semester hours without permission may result in termination from the program.

Students in clinical or school psychology must complete a year of internship.

Before admission to candidacy for the doctorate in psychology, the student must demonstrate an average proficiency in using two research tools or high proficiency in using one research tool. The selection of these research tools must be approved by the student's advisor. Proficiency is normally demonstrated by the successful completion of such courses as are designated by the department and approved by the Graduate School.

The student must pass an extensive written candidacy examination covering the student's curricular area.

The student must complete a dissertation which will be a substantial contribution to knowledge in which the student exhibits original scholarship and the ability to conduct independent research. Prior to the time the student begins gathering the dissertation research data, a proposal of a dissertation must be approved by a dissertation advisory committee and filed with the department. Normally, an advisory committee will be made up of the dissertation director and at least two additional committee members.

The student is responsible for obtaining the Psychology Department Graduate Student Manual and for complying with the regulations in that manual.

After all other requirements for the Ph.D. in psychology have been met, including submission of a complete manuscript that has been tentatively approved by the dissertation advisory committee, a student must successfully defend the dissertation. The defense will be conducted by and in the presence of an oral examining committee made up of the advisory committee plus additional members; serving as readers; however, other members of the department and the faculties of other disciplines will be invited to attend and participate. The dean of the Graduate School or a dean's designee may serve as an ex officio, nonvoting member of the dissertation defense committee.

Other special requirements may be determined by the department and the curricular area in which the student chooses to study.

Course List
417. PRINCIPLES OF BEHAVIOR MODIFICATION (3). An introduction to the psychological principles, methods, and issues in behavior modification. Emphasis on the theoretical and empirical foundations of the various strategies for producing behavior change and on the ethical issues involved in the use of behavioral techniques. Not available for credit toward graduate degrees in psychology. PRQ: Either PSYC 315 or PSYC 316, or consent of department.

425. ADULT DEVELOPMENT AND AGING (3). Behavioral development from early adulthood through old age. Emphasis on the biological, motor, cognitive, social, and personality characteristics at various stages of development. PRQ: PSYC 324 or consent of department.

426. THEORIES OF PERSONALITY (3). A systematic study of the theoretical contributions of major psychologists to basic understanding of the dynamics of human personality. PRQ: Either PSYC 332 or PSYC 372, or consent of department.

428. HISTORY OF PSYCHOLOGY (3). A review of the historical roots of the science of psychology and the development of the field to contemporary times. PRQ: At least 3 semester hours of upper-division undergraduate credit in psychology, 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. Not available for credit toward graduate degrees in psychology. PRQ: PSYC 324, or consent of department.
539. PROFESSIONAL SCHOOL PSYCHOLOGY (3). A review of the history and development of school psychology, types of problems handled, methods employed, and current perspectives on psychological work in the schools with emphasis on research functions and the utilization of principles of learning. PRQ: Consent of department.

540. CLINICAL PSYCHOLOGY I: THEORY AND ASSESSMENT OF INTELLECTUAL FUNCTIONING (3). A historical review of theory and research concerning the definition and measurement of intelligence. Topics covered include intellectual development, factor analytic and theoretical contributions to understanding the etiology and maintenance of intellectual functioning and for such clinical problems as retardation, brain damage, and thought disorders. PRQ: Graduate standing in psychology or consent of department.

541. CLINICAL PSYCHOLOGY II: THE ANALYSIS OF BEHAVIOR PATOLOGY (3). Evaluation of criteria, definitions, and classificatory schemes of psychopathology. Review of theoretical and research contributions to understanding the etiology and maintenance of behavior problems. Instruction in obtaining information, conceptualizing, and formulating treatment plans with special clinical groups. PRQ: Consent of department.

542. CLINICAL PSYCHOLOGY III: PERSONALITY ASSESSMENT (3). Examination of theoretical and practical issues in the assessment of personality with emphasis on problems of reliability, validity, and test construction in this area. Review and evaluation of the use and research on personality tests. Supervised practice in administering, scoring, and reporting intelligence test results and evaluating their implications for intervention. PRQ: PSYC 540 or PSYC 541, or consent of department.

543. CLINICAL PSYCHOLOGY IV: THEORIES OF PSYCHOTHERAPY (3). Examination and evaluation of the major theoretical approaches to psychotherapy including the psychoanalytic schools, client-centered, existential, and learning models. PRQ: PSYC 541 or consent of department.

544. CLINICAL PSYCHOLOGY V: BEHAVIOR MODIFICATION (3). Presentation and discussion of various intervention techniques associated with behavior and learning theories and derived from empirical research on behavior change. PRQ: PSYC 543 or consent of department.

545. CHILD PSYCHOPATHOLOGY (3). Examination of research and theoretical contributions to understanding the etiology and maintenance of psychopathology in children from infancy through adolescence. Instruction in diagnosis and the formulation of treatment plans for children with various social, emotional, and intellectual disorders at various stages of development. PRQ: PSYC 541 or consent of department.

546. PSYCHOLOGICAL ASSESSMENT OF CHILDREN (3). Examination of the concepts and techniques relating to the clinical assessment of children from infancy through adolescence. The course covers a variety of assessment techniques including standardized tests, behavioral observations, and interviews. Students receive supervised practice in administering, interpreting, and reporting the results of intelligence and personality tests batteries, and in evaluating the implications of their findings for the child's functioning at home and at school. PRQ: PSYC 540, PSYC 542, and PSYC 544, or consent of department.

547. PSYCHOLOGICAL INTERVENTION WITH CHILDREN AND THEIR FAMILIES (3). Examination of the concepts and techniques relating to clinical psychological intervention with children and their families. Emphasis on theoretical, ethical, and practical issues as well as on the psychological research on the efficacy of each therapeutic modality. Topics cover the major therapeutic techniques used in psychological intervention with children at various ages and levels of functioning and with various forms of psychopathology. PRQ: PSYC 543 and PSYC 544, or consent of department.

548. CONSULTATIVE INTERVENTIONS IN SCHOOL AND COMMUNITY SETTINGS (3). Examination of consultation theory, research, and practice as applied by school psychologists. Emphasis on the major models of consultation employed within school and community settings. Empirical research related to outcome of consultation. The application of consultative interventions to specific psychological disorders commonly found in school and community settings. PRQ: Consent of department.

551. CLERKSHIP IN CLINICAL PSYCHOLOGY (1-3). Pre-internship experience in institutional settings, such as the school system, clinics, and hospitals. The student will be assigned to one or more institutions where a supervised work program will be designed involving psychological assessment and intervention consistent with the student's experience and training. May be repeated to a maximum of 3 semester hours. PRQ: Admission to the clinical training program.

553. PRACTICUM IN SCHOOL PSYCHOLOGY (1-3). Experience in psychological work in schools. Activities will vary depending on the prior experience of the student but may include observation and analysis of behavior, assessment of learning disabilities, research work, design of learning programs, and consultation with school personnel. May be repeated but only 15 semester hours may be applied toward a graduate degree in psychology. PRQ: PSYC 539 or consent of department.

554. PRACTICUM IN PSYCHOTHERAPY (1-3). Supervised experience in planning and executing a therapeutic program with clients who have sought help for adjustment and personality problems. May be repeated, but only 15 semester hours may be applied toward a graduate degree in psychology. PRQ: Approval of the clinical training area.

555. INTERNSHIP IN CLINICAL PSYCHOLOGY (6-12). A period of one year in a setting such as a hospital or clinic where the student will perform the functions of a clinical psychologist under the direct supervision of qualified personnel. The internship must have the approval of the clinical psychology faculty. The student must register for 12 semester hours during each of the fall and spring semesters and for 6 semester hours during the summer session for a total of 30 semester hours, of which 4 may be applied to the 60 semester hours required for the doctoral program. PRQ: Departmental approval for the doctoral program in clinical psychology.

556. INTERNSHIP IN SCHOOL PSYCHOLOGY (12). A period of one year in a school setting where the student will perform the functions of a school psychologist under the direct supervision of qualified personnel. The internship must have the approval of the school psychology faculty. The student must register for 12 semester hours in each of the fall and spring semesters for a total of 24 semester hours, of which 4 may be applied to the 90 semester hours required for the doctoral program. PRQ: Consent of department. Recommended: At least 2 semester hours of PSYC 553.

557. BEHAVIORAL DEVELOPMENT (3). An intensive review of the processes involved in behavioral development. The focus is on the factors affecting these processes, rather than on a cross-sectional description of characteristic behavioral changes related to age. PRQ: Psychology major or consent of department.

560. STUDIES IN EXPERIMENTAL PSYCHOLOGY (1-6). A. Learning B. Perception C. Motivation D. Sensory Processes E. Physiological J. Comparative K. Mathematical F. Psychology Specialized courses in the area of experimental psychology offered under the appropriate heading. The courses will be on specific topics within this area and may be lecture, laboratory, seminar, or a combination of these methods. The topics and the semester hours of credit will vary from semester to semester. May be repeated to a maximum of 21 semester hours.

571. STUDIES IN GENERAL PSYCHOLOGY (1-6). A. Behavioral Development B. Individual Differences C. Personality D. Quantitative Methods E. Instrumentation F. Social Behavior Specialized courses in the area of general psychology offered under the appropriate heading. The courses will be on specific topics within this area and may be lecture, laboratory, seminar, or a combination of these methods. The topics and the semester hours of credit will vary from semester to semester. May be repeated to a maximum of 18 semester hours.

572. STUDIES IN CLINICAL PSYCHOLOGY (1-6). A. Clinical Methods B. Behavioral Pathology C. Psychosocial Processes D. Child-Clinical E. Psychotherapy Specialized courses in the area of clinical psychology offered under the appropriate heading. The courses will be on specific topics within this area and may be lecture, laboratory, seminar, or a combination of these methods. The topics and the semester hours of credit will vary from semester to semester. May be repeated to a maximum of 15 semester hours.

575. DEVELOPMENT OF LANGUAGE ACQUISITION (3). Critical evaluation of recent research and theory in developmental psychology on the processes underlying normal language acquisition and development. Background in developmental psychology is assumed, and background in language development is desirable.
576. SOCIAL-PERSONALITY DEVELOPMENT (3). The development of social behavior and personality characteristics throughout the life-span with emphasis on the changes occurring throughout childhood. Among the topics to be covered are attachment, aggression, sex-role development, moral development, socialization processes, parent-child relations, peers and the impact of television, and social-class and crosscultural comparisons.

577. DEVELOPMENT OF PERCEPTION AND LEARNING (3). The development of perception and children's learning with emphasis on the basic processes and changes which occur during childhood. Topics include visual attention in infancy, form and pattern perception, the development of visually guided behavior, perceptual integration, information processing approaches to perceptual development, infant learning, and higher-order learning and motivation.

578. DEVELOPMENT OF COGNITION AND MEMORY (3). The development of cognitive skills and memory with emphasis on the basic processes and changes which occur during childhood. The topics to be covered include overview of cognitive theorists, conceptualizations of cognitive growth patterns, concept development, problem solving, cognitive styles, developmental aspects of obtaining and storing stimulus information, selective attention, and metamemory.

580. SEMINAR IN PSYCHOLOGY (1-3).
A. Psychotherapy
B. School Psychology
C. Professional Problems
Specialized topics will be considered that are of professional concern to those entering the field of psychology. May be repeated to a maximum of 7 semester hours in each subsection. PRQ: Consent of department.

581. PRACTICUM IN COLLEGE TEACHING OF PSYCHOLOGY (1-3). Supervised experience in teaching selected undergraduate courses in psychology. Instructional techniques, materials, and methods of evaluation. May be repeated, but only 8 semester hours may be applied toward a graduate degree in psychology. S/U grading. PRQ: Consent of department.

585. INDEPENDENT STUDY (1-6). May be repeated, but only 6 semester hours may be applied toward the M.A. degree and only 15 semester hours may be applied toward the Ph.D. degree.

590. PSYCHOLOGICAL RESEARCH (1-3). Supervised research training in planning, design, execution, and analysis of psychological research. Required of all graduate students in psychology each semester prior to the approval of a dissertation proposal. May be repeated without limit, but may not be used to meet the minimum credit hour requirements for a graduate degree in psychology. S/U grading.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours. Registration requires prior appointment of a thesis adviser and consent of department.

699A. PH.D. DISSERTATION (3-15). May be repeated to a maximum of 24 semester hours. Registration requires prior appointment of a dissertation adviser and consent of department.

699B. PH.D. DISSERTATION (1). Open only to students who have successfully completed the oral defense of the dissertation research and received departmental approval of the final version of the dissertation document.
Department of Sociology (SOCl)

Chair: W. William Minor

Graduate Faculty

Kevin Anderson, associate professor, Ph.D., City University of New York, Graduate Center
Charles L. Cappell, associate professor, Ph.D., University of Chicago
Man Singh Das, professor, Ph.D., Oklahoma State University
Kay B. Forest, associate professor, Ph.D., Cornell University
Joseph E. Harry, professor, Ph.D., University of Oregon
Clinton J. Jesser, professor, Ph.D., Michigan State University
David H. Kamens, professor, Ph.D., Columbia University
George A. Kourvetaris, professor, Ph.D., Northwestern University
David F. Luckenbill, professor, Ph.D., University of California, Santa Barbara
James L. Massey, associate professor, Ph.D., University of Iowa
William C. McCready, associate professor, Ph.D., University of Illinois, Chicago
W. William Minor, associate professor, Ph.D., Florida State University
Robin D. Moremen, assistant professor, Ph.D., Yale University
Kristen A. Myers, assistant professor, Ph.D., North Carolina State University
John K. Rhoads, professor, Ph.D., University of Wisconsin
Herbert J. Rubin, professor, Ph.D., Massachusetts Institute of Technology
Gian Sarup, associate professor, Ph.D., Pennsylvania State University
John F. Stolte, professor, Ph.D., University of Washington
Robert W. Suchner, associate professor, Ph.D., University of Wisconsin
Jim Thomas, professor, Ph.D., Michigan State University

John F. Stolte, professor, Ph.D., University of Washington
Robert W. Suchner, associate professor, Ph.D., University of Wisconsin
Jim Thomas, professor, Ph.D., Michigan State University

The Department of Sociology offers graduate courses and research opportunities leading to the M.A. degree. Graduate work in sociology is designed to prepare students for teaching and research in sociology, for positions in public and private agencies, and for further advanced study.

Master of Arts in Sociology

Applicants for admission to the program should have a background equivalent to 3 semester hours in sociological theory, sociological methods, and statistics. Students with deficiencies in these areas may be required to take appropriate course work to remove these deficiencies as soon as possible after enrollment. Students admitted to these programs with stipulated deficiencies will be informed by the graduate adviser of the courses that must be taken.

Graduate courses are classified into six fields: theory, research methods and statistics, social organization and institutions, social psychology, sociology of health and aging, and criminology. The specific classification of courses by field can be obtained from the sociology office.

Students must earn an overall GPA of 3.00 or better and a grade of A or B in SOCI 570 and/or SOCI 571, SOCI 575, and SOCI 576.

The M.A. degree can be earned by the successful completion of either a thesis or a non-thesis option in the program. Students planning to pursuit the doctorate should enroll in the thesis option. Students planning to enter or resume careers at the master's degree level should enroll in the non-thesis option. All new master's students are required to consult with the departmental graduate adviser before being admitted to courses.

No more than 12 semester hours in 400-level graduate courses may be included in the student's program for the master's degree with a thesis option, and no more than 15 hours in 400-level graduate courses may be included in the student's program for the master's degree with a non-thesis option.

The comprehensive examination requirement may be met by a written examination or by an oral presentation of research conducted by the student. In the latter case, the examining committee will ask questions about related theoretical and methodological issues in sociology, as well as about the research itself.

Thesis Option

The thesis option is designed primarily for pre-doctoral students or for those desiring a traditional liberal arts master's degree. Students pursuing the thesis option will be required to complete a minimum of 30 semester hours either in the track in general sociology or in the specialization in criminology.

General Sociology

SOCI 570, Classical Sociological Theory (3)
SOCI 571, Contemporary Sociological Theory (3)
SOCI 575, Sociological Statistics (3)
SOCI 576, Advanced Research Methodology (3)
SOCI 599, Master's Thesis (6)

One course selected in consultation with the graduate adviser (3)
Three courses in one of the following areas: theory, research methods and statistics, social organizations and institutions, social psychology, sociology of health and aging, or criminology (9)

Specialization in Criminology

SOCI 570, Classical Sociological Theory (3), OR SOCI 571, Contemporary Sociological Theory (3)
SOCI 575, Sociological Statistics (3)
SOCI 576, Advanced Research Methodology (3)
SOCI 581, Theories of Delinquency and Crime (3)
SOCI 589, Criminal Justice in Society (3)
SOCI 599, Master's Thesis (6)

Two electives in criminology selected from graduate offerings in consultation with the graduate adviser (6)

Non-Thesis Option

The non-thesis option is designed for those students who expect to follow careers that do not require the doctorate. Students pursuing the non-thesis option will be required to complete a minimum of 36 semester hours including 6 semester hours of ILAS 502, Internship, a set of core courses (9 semester hours), an applied sequence (9 semester hours), and the track in general sociology or the specialization in criminology (12)

At the discretion of the department, the requirement for ILAS 502 may be waived if a student has had appropriate professional experience. In such cases, ILAS 502 will be replaced by 6 semester hours of electives chosen in consultation with the graduate adviser.
### Core Courses
- SOCI 570, Classical Sociological Theory (3)
- OR SOCI 571, Contemporary Sociological Theory (3)
- SOCI 575, Sociological Statistics (3)
- SOCI 576, Advanced Research Methodology (3)

### Applied Sequence
The applied sequence is a set of courses thought to have particular relevance for types of employment appropriate for master's-level sociology graduates and is intended to complement a traditional sociological education, not to replace a professional degree in sociology graduates and is intended to complement a traditional applied sequence in another field. The applied sequence consists of a set of three courses in one of the following areas: public health applications, sociological education, not to replace a professional degree in another field. The applied sequence consists of a set of three courses in one of the following areas: public health applications, sociological education, or a specially designed applied sequence approved in advance by the graduate adviser. A list of courses approved for these applied sequences is available in the Department of Sociology office.

### General Sociology
Twelve semester hours (6 semester hours each in two areas) must be completed in the areas of theory, research methods and statistics, social organizations and institutions, social psychology, sociology of health and aging, or criminology.

### Specialization in Criminology
- SOCI 581, Theories of Delinquency and Crime (3)
- SOCI 589, Criminal Justice in Society (3)

Two criminology elective courses selected from graduate offerings in consultation with the graduate adviser (6)

### Course List

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>450.</td>
<td>SOCIAL INEQUALITY (3). Causes and consequences of inequality; economic, political, ethnic, and power dimensions; sources of conflict and class behavior; analysis and measurement of social stratification and mobility. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department.</td>
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<tr>
<td>451.</td>
<td>MEDICAL SOCIOLOGY (3). An introductory examination and comparison of organizational structures and social roles within medical institutions. Particular attention is given to sociological perspectives for understanding antecedents and consequences of mental and physical health problems and how medical institutions relate to other institutions in society. PRQ: SOCI 250 or SOCI 251, or consent of department.</td>
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<td>452.</td>
<td>SOCIOLOGY OF EDUCATION (3). The relationship of the educational system to the social structure; the changing function of education in an advanced industrial society; the impact of education on technological changes and social mobility; a comparison of systems in various cultures. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department.</td>
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<tr>
<td>453.</td>
<td>RACIAL AND ETHNIC MINORITY FAMILY SYSTEMS (3). Comparison and analysis of ethnic and racial minority family systems in American society. White, black, native American, Asian, Spanish-speaking, Jewish, utopian, and alternative forms of family systems will be surveyed. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department. Recommended: SOCI 354.</td>
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<tr>
<td>455.</td>
<td>ENVIRONMENTAL SOCIOLOGY (3). Relationship of the physical environment (&quot;natural&quot; and &quot;built&quot;) to human behavior and social structure. Several specific topics include population and urbanization, technological development, energy resources, housing, architectural design, natural disasters, occupational health and safety, industrial waste and pollution, and environmental change. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department.</td>
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<tr>
<td>456.</td>
<td>COMPARATIVE FAMILY SYSTEMS (3). Structural-functional and comparative analysis of family systems in relation to other societal systems and to social change. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department. Recommended: SOCI 354.</td>
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<tr>
<td>457.</td>
<td>OCCUPATIONS IN THE SOCIAL STRUCTURE (3). Cultural definitions of work; the concepts of career and mobility; occupational choice theories; consequences of occupational specialization for social integration. Problems of disengagement from work. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department.</td>
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<tr>
<td>458.</td>
<td>POLITICAL SOCIOLOGY (3). The relationship between political and social structures with emphasis on the concepts of power, ideology, elites, class, and politics. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department.</td>
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<td>459.</td>
<td>SOCIAL STRUCTURE AND THE LIFE COURSE (3). Aging as a life-long process of development through socially structured, historically conditioned stages. Topics include role transitions, intergenerational conflicts, and age norms. Emphasizes stages prior to old age. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department.</td>
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<td>460.</td>
<td>INTERGROUP RELATIONS (3). Analysis and exposition of cultural and social-psychological influences underlying relations among racial, ethnic, and other minority and majority groups. Emphasis on problems of prejudice and discrimination, and the promotion of harmonious intergroup relations. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department.</td>
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<tr>
<td>461.</td>
<td>AGING AND SOCIETY (3). Interpersonal, structural, and cultural aspects of age and aging. Emphasizes old age. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department.</td>
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<td>462.</td>
<td>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, and person perception and attribution processes. PRQ: SOCI 260 or consent of department.</td>
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<td>463.</td>
<td>SOCIOLOGICAL THEORY (3). Sociological theory as a body of unifying principles and as a guide for research. The significant contributions of outstanding sociologists past and present. Does not count for credit toward the M.A. or M.S. in sociology. PRQ: Consent of department.</td>
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<td>464.</td>
<td>HEALTH ORGANIZATIONS AND DELIVERY OF SERVICES (3). Social structure of hospitals, public health, and ambulatory care settings. Comparison of health care systems in U.S. and selected other nations, differences in financing, utilization, staffing, and relations with other social institutions. PRQ: SOCI 250 or SOCI 251, or consent of department.</td>
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<td>465.</td>
<td>SEMINAR IN SOCIOLOGICAL RESEARCH METHODS (4). A. Survey Methods B. Experimental Methods C. Quantitative Methods D. Field Methods E. Multi-methods F. Evaluation Research Methods May be repeated to a maximum of 12 semester hours as the topic changes. PRQ: SOCI 376 and SOCI 473 and either STAT 208 or STAT 301; or consent of department.</td>
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<td>466.</td>
<td>POLICE IN A DEMOCRATIC SOCIETY (3). The police, their organization, and their functions will be examined with special attention to political and social factors that affect their activities. Police relations with the community and particularly with minority groups, the problems of brutality, corruption, and political involvement. PRQ: SOCI 289 or consent of department.</td>
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<td>467.</td>
<td>JUVENILE DELINQUENCY (3). Social and psychological factors in delinquent behavior; causation, prevention, and rehabilitation; the role of community agencies; the juvenile court. May include visits to juvenile correctional agencies. PRQ: SOCI 288 or consent of department.</td>
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<td>468.</td>
<td>SOCIOLOGY OF THE MIDWEST (3). The Midwest region will be delineated and analyzed in terms of the interplay between the environment and everyday life, and according to the formation of a regional culture and socioeconomic system. Investigation of the relation of the Midwest to other regions. PRQ: SOCI 170 or SOCI 250 or SOCI 260, or consent of department.</td>
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<tr>
<td>469.</td>
<td>COMPARATIVE CRIMINOLOGY (3). An historical and comparative analysis of crime and the criminal justice system in Europe, the United States, underdeveloped countries, and socialist societies. PRQ: SOCI 286 and SOCI 289, or consent of department.</td>
<td>3</td>
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</table>
496X. MATERIALS AND PROBLEMS OF HIGH SCHOOL INSTRUCTION IN THE SOCIAL SCIENCES (3). HIST 496. Must be taken by students seeking certification in a social science before student teaching. Includes 15 clock hours of clinical experience, attention to the teaching of exceptional students, planning for multicultural learning situations, and techniques of reading in the social sciences. PRQ: Consent of department.

550. COMPLEX ORGANIZATIONS (3). Comparative analyses of the functioning of complex groupings: growth, authority, leadership and decision-making, centralization and dispersion, survival and change in various types of organizations. PRQ: SOCI 170 and one other course in sociology, or consent of department.

552. COMMUNITY ANALYSIS (3). Selected topics and studies in the structure and functioning of urban communities. Attention given to urbanization and other processes and associated factors. PRQ: 9 semester hours of sociology or consent of department.

553. SOCIAL DYNAMICS (3). The constants of social change, the variability of rates of change, the factors involved from a sociological point of view in the various forms of revolution typified by the industrial revolution, the Protestant Reformation and various political movements. PRQ: 9 semester hours of sociology or consent of department.

559. SOCIAL STRUCTURE AND DEVELOPMENT (3). The comparative analysis of social structural change resulting from industrialization and modernization in developing societies. PRQ: Consent of department.

560. SOCIAL STRUCTURE AND PERSONALITY (3). Interrelationships between social systems and personality over the life cycle. PRQ: 9 semester hours in sociology including a course in social psychology, or consent of department.

564. RESEARCH FIELDS AND PROBLEMS IN SOCIAL PSYCHOLOGY (3). Historical developments related to recent research in experimental social psychology, small groups, and related fields. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department. Recommended: A course in social psychology.

570. CLASSICAL SOCIOLOGICAL THEORY (3). Critique of Durkheim, Weber, and other early theorists. PRQ: SOCI 370 or consent of department.

571. CONTEMPORARY SOCIOLOGICAL THEORY (3). Critique of Mead, Parsons, Becker, Homans, Merton, and other recent theorists. PRQ: SOCI 473 or consent of department.

572. PROSEMINAR IN SOCIOLOGY (3). Analysis and synthesis of current research, concepts, and issues in various areas. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

575. SOCIOLOGICAL STATISTICS (3). Methods of sampling and testing hypotheses; statistical inference; correlation and other measures of association; and methods of treating both quantitative and nonquantitative variables. PRQ: 3 semester hours in statistics or consent of department.

576. ADVANCED RESEARCH METHODOLOGY (3). The scientific approach, selection of problems, design, and methods of analysis. PRQ: SOCI 476 or consent of department.

581. THEORIES OF DELINQUENCY AND CRIME (3). Relation of theories of delinquency and crime to general biological, sociological, and psychological theories. PRQ: SOCI 488 or consent of department.

582. LAW AND SOCIAL CONTROL (3). The institutional relationships among social order, law, justice, and legal coercion. Emphasis on factors underlying the enactment, enforcement, and administration of the law, including interest-group politics, social structure, and economic institutions. Court and police tensions, the changing role of policing in America, and minority pressures on the law and the police. PRQ: SOCI 488 or consent of department.

587. PENALOGY AND PENAL INSTITUTIONS (3). Justice and punishment; penal reformers and their social context; penitentiaries and reformatories in the 19th century; the designs and origins of modern prisons; the prison system; the courts and modern prisons. PRQ: SOCI 488 or consent of department.

589. CRIMINAL JUSTICE IN SOCIETY (3). The police, courts, and corrections in America: their organizations and policies, their patterns of recruitment and promotion, plea bargaining, police power, treatment of minorities, and sensitivity to social and political issues. Selected communities will be examined. PRQ: Previous course in criminology or consent of department.

590. INDEPENDENT STUDY IN SOCIOLOGY (1-3). Supervised readings and research in special areas of sociology. May be repeated to a maximum of 6 semester hours. PRQ: Written permission of department.

599. MASTER'S THESIS (1-6). May be repeated to a maximum of 6 semester hours.

651. SEMINAR IN SOCIAL INSTITUTIONS AND SOCIAL ORGANIZATION (3). Recent research in particular institutions (religion, family, education, or other topics) or in aspects of social organizations (stratification, population, or other selected topics). May be repeated to a maximum of 6 semester hours as topic changes. PRQ: Consent of department.

661. SEMINAR IN SOCIAL PSYCHOLOGY (3). Theory, experimental social psychology, small groups, gerontology, or other topics. May be repeated to a maximum of 9 semester hours. PRQ: A graduate course in social psychology or consent of department.

662. SEMINAR IN SOCIOLOGY OF HEALTH/AGING (3). Recent developments in the sociological study of health and/or aging. May be repeated to a maximum of 6 semester hours as topic changes. PRQ: Consent of department.

670. SEMINAR IN SOCIOLOGICAL THEORY (3). Analyses of viewpoints, such as functionalism, systems theory, conflict theory, symbolic interactionism, or areas such as logic of research, social change, sociology of knowledge, or other topics. May be repeated to a maximum of 9 semester hours. PRQ: SOCI 571 or SOCI 572, or consent of department.

675. SEMINAR IN RESEARCH METHODS (3). Recent developments in methods of sociological research (systems analysis, survey methods, statistical techniques, or other specific methodological problems). May be repeated to a maximum of 6 semester hours as topic changes. PRQ: Consent of department. Recommended: SOCI 576.

681. SEMINAR IN SOCIAL DISORGANIZATION/CRIMINOLOGY (3). The analysis of conflict, war, revolution, natural catastrophes, social change; or delinquency and crime, prison systems, criminal law, or criminal justice. May be repeated to a maximum of 6 semester hours as topic changes. PRQ: Consent of department. Recommended: SOCI 581.
College of Visual and Performing Arts

Dean: Harold Kafer, Ph.D.
Associate Dean: G. Allan O'Connor, M.M.

School of Art
School of Music
School of Theatre Arts
The School of Art (ART)

Chair: Richard M. Carp

Graduate Faculty

Renie B. Adams, visiting professor, M.F.A., Indiana University
Leif Allmendinger, associate professor, M.F.A., Rhode Island School of Design
Caroline C. Allrutz, professor, Ed.D., Illinois State University
Carmen L. Armstrong, professor, Ed.D., Indiana University
Jon Ashmann, associate professor, B.S., Illinois Institute of Technology
Jay P. Bell, professor, M.F.A., University of Wisconsin
Dorothy A. Bilder, associate professor, M.F.A., Southern Illinois University
Rudolf M. Bisanz, professor, Ph.D., Syracuse University
David C. Bower, professor, M.A., Northern Illinois University
Bradley Brechin, assistant professor, Master of Graphic Design, North Carolina State University
Richard M. Carp, professor, Ph.D., Graduate Theological Union, Berkeley
Richard M. Cooler, professor, Ph.D., Cornell University
Dennis DeLap, associate professor, M.Arch., University of Illinois, Chicago
John N. DeLillo, professor, M.A., Ohio State University
Gordon J. Dorn, professor, M.F.A., University of Wisconsin
Yale Factor, professor, M.F.A., East Texas State University
Deirdre Frazier, assistant professor, M.F.A., University of Wisconsin
Lawrence J. Gregory, associate professor, M.F.A., Ohio University
Joshua B. Kind, professor, Ph.D., Columbia University
Katherine Kahn, assistant professor, M.F.A., Yale University
Jeff K. Kowalski, professor, Ph.D., Yale University
Frank Kulesa, associate professor, M.F.A., Northern Illinois University
Yih-Wen Ku, associate professor, M.F.A., Southern Illinois University
Avra S. Liakos, associate professor, University of Athens
Christine LoFaso, assistant professor, M.F.A., School of the Art Institute of Chicago
Stanley Madejka, professor, Ph.D., University of Minnesota
Benjamin L. Mahmoud, professor, Distinguished Research Professor, M.F.A., Ohio University
Ronald S. Mazanowski, professor, M.F.A., University of Wisconsin
John F. McCarthy, professor, M.F.A., School of the Art Institute of Chicago
Philip Melnick, professor, M.F.A., University of California at Los Angeles
Jerry D. Meyer, assistant chair, professor, Ph.D., New York University
Mark Nelson, professor, M.F.A., University of Michigan
Lee B. Peck, professor, M.F.A., University of Wisconsin
Charlotte Rollman, associate professor, M.F.A., University of Illinois
Deborah Smith-Shank, associate professor, Ph.D., Indiana University
Judith Texta, professor, Presidential Teaching Professor, Ph.D., University of Chicago
Joseph Udouei, assistant professor, Ed.D., University of Illinois
Val Valgardson, assistant professor, M.F.A., University of California, San Diego
Harry J. Wirth, associate professor, B.S., University of Wisconsin, Milwaukee
J. Terry Zeller, professor, Ph.D., University of Minnesota

The School of Art offers graduate programs leading to the M.A., M.S., and M.F.A. degrees. Its programs are accredited by the National Association of Schools of Art and Design.

Admission to graduate programs in the School of Art usually requires a baccalaureate degree in a field of art related to the program for which the student is applying. Applicants who do not have a major in art or in their field of study may be assigned deficiencies by faculty in the program area to which the student is admitted based upon review of admissions materials. Deficiencies will be listed in the letter of admission from the Graduate School or in the student's program of courses.

An adviser in the student's area of interest is assigned upon acceptance into the Graduate School. The student must establish contact with the adviser immediately. The adviser will assist in forming the three-member (minimum) graduate advisory committee which will guide the student in all subsequent activities required for the completion of the degree.

With the consent of the School of Art and the dean of the Graduate School, a maximum of 6 semester hours of course work from the M.A. program in art at NIU may be accepted toward the M.F.A. degree. Similarly, a maximum of 9 semester hours of graduate credit from an M.A. program completed at another institution may be accepted toward the M.F.A. degree. A maximum of 9 semester hours of graduate transfer credit earned at NIU as a student-at-large may be accepted toward an M.A., M.S., or M.F.A. degree. However, in meeting the requirements for a graduate degree in art, the credit transferred from other accredited institutions plus that earned at NIU as a student-at-large may not exceed 15 semester hours.

For a student pursuing the M.F.A. degree in art, up to 30 semester hours of course work from the M.A. program in art at NIU may be counted toward meeting the requirements of the M.F.A. degree, with the consent of the student's M.F.A. advisory committee.

The M.F.A. is a terminal degree in the fields of art and design. Aside from allowed credit from the M.A. program, course work and all requirements for the M.F.A. degree must be completed within a seven-year period.

A graduate student admitted to any M.A. or M.F.A. program in the School of Art may take up to 6 elective credits outside the school, subject to prior approval of the student's graduate advisory committee. Courses in this category must be entered on the official program of courses.

The School of Art may retain for its collection any work produced in scheduled classes or presented for the one-person show.

Information concerning the various programs can be obtained upon request from the graduate coordinator in the School of Art.
Special Requirements for Studio Degrees

The GRE is not required for admission to the M.F.A. or the M.A. specialization in studio art; however, the School of Art requires portfolio from all applicants for admission to the Graduate School who wish to pursue a studio degree in art (M.A. or M.F.A.). A prospective student must submit 10 35mm color slides of his or her work as it relates to the intended course of graduate study. An additional 10 slides may be submitted if desired in another area of competency in studio work. Each slide is to be identified with the name of the applicant, title of work, date of execution, medium, and size. The slide should be marked with a red dot on the lower left.

Applicants may substitute film and/or electronic media where appropriate to the field of study. The materials must be submitted in reusable containers acceptable for the U.S. postal service mailing requirements, return postage included. All materials must be clearly identified with the name of the applicant, title of work, date of execution, medium, and return address. Although all possible care is taken, the School of Art cannot assume responsibility in case of loss or damage.

March 1 is the final date for receiving all application materials for summer, fall, or spring admission to any graduate studio degree program including portfolio, a listing of works in the portfolio, a statement of career goals and objectives, transcripts, GPA, GRE scores, TOEFL if necessary, and two letters of recommendation.

Slides to be considered for admission purposes should be sent to the graduate coordinator in the School of Art; other application materials are to be submitted to the Graduate School.

Master of Science in Art

The student pursuing the M.S. in art must choose two specializations. Applicants for the specialization in art education must have an undergraduate degree with course work in art or art education subject to approval by the School of Art. Applicants for the specialization in art therapy must have an undergraduate degree in art, art education, psychology, or other related field approved by the School of Art.

Core Courses (9)
- ART 581 (3) Learning Theory in Art Education
- ART 583 (3) Seminar in Art Education
- ART 585 (3) Research Readings in Art Education

Specialization in Art Education (24)
- ART 582 (3) Curriculum Development in Art Education
- ART 584 (3) History and Philosophy in Art Education
- Two of the following (6)
  - ART 463 (3) Application of Aesthetics, Art History, and Criticism in Art Education
  - ART 480 (3) Alternative Teaching Experiences
  - ART 484 (3) Interrelated Arts Education
  - ART 586 (3) Policy Studies for the Administration and Supervision of Art Programs
  - ART 587 (3) Evaluation in Art Education
  - ART 588 (3) Alternative Methods of Instruction in Art
  - ART 681 (3) Research Topics: Independent Study (3 or 9)
  - ART 684 (3) Research Methods in Art Education

Electives in art history, studio, related professional courses, or additional electives in art education (12)

A maximum of 9 semester hours may be taken outside the School of Art. Any program requires the written approval of the major adviser.

Specialization in Art Therapy (27)

Prerequisites include 15 semester hours in studio art and 12 semester hours in psychology, including developmental and abnormal psychology.

Students who plan a career goal in a medical hospital setting are eligible for course substitutions in basic life sciences or course work in the School of Allied Health Professions as deemed appropriate in advisement.

- ART 575 (3) Materials and Resources in Art Therapy
- ART 576 (3) Approaches and Techniques in Art Therapy
- ART 577 (3) Art as a Therapeutic Agent
- ART 578 (3) Case Studies in Art Therapy
- ART 682 (3) Clinical Internship in Art Therapy
- OR AHPH 551 (3) Clinical Supervision Practicum
- ART 688 (3) Supervision Seminar in Art Therapy

Course work from the following (3)
- AHP 444 (3) Topics in Allied Health Professions
- AHPH 550 (3) Workshop in Health Services Delivery
- AHPH 510 (3) Crisis Theory and Case Management
- AHPH 585 (3) Independent Study
- ART 480 (3) Alternative Teaching Experiences
- EPCO 530 (3) Counseling Theories and Practices
- EPS 540 (3) Foundations of Special Education
- EPSE 533 (3) Standardized Testing
- FCNS 484 (3) Advanced Family Relationships
- FCNS 486 (3) Aging and the Family
- PSYC 426 (3) Theories of Personality
- PSYC 465 (3) Advanced Developmental Psychology
- SOCI 461 (3) Intergroup Relations
- SOCI 482 (3) Sociology of Death and Dying

Upon completion of 2,000 hours of paid, supervised clinical employment above and beyond the M.S. in art with a specialization in art therapy, graduates may apply for art therapy registration with the American Art Therapy Association.

Teacher Certification

Persons holding a baccalaureate degree may complete requirements for the State of Illinois Standard Special (K-12) Certificate through the art education division of the School of Art as part of the degree program for the M.S. in art with a specialization in art education. With adviser approval, graduate-level requirements for certification can be part of the 33 semester hours required for this specialization.

Admission Requirements

Obtain program recommendations from the art education graduate certification coordinator.

Successful completion of State of Illinois basic skills test.

Completion of ART 342A and ART 342B with a grade of at least C in each course.

Admission to NIU's Graduate School through the School of Art.

Retention

Students must remain in good standing in the Graduate School. In addition students must maintain an average 3.00 GPA or above, and receive no final grade lower than C in art education methods courses (ART 342, ART 344, ART 345, and ART 463.) They must have and maintain a minimum GPA of 2.75 in all NIU undergraduate art courses required for certification in order to enroll in the above methods courses. They must have at least a 2.50 GPA in all NIU undergraduate courses required for certification. Students may not student teach if these GPA requirements are not met. Students who fall below a required GPA may appeal in writing for one probationary semester to the chair of the art education division.
Admission to Student Teaching
In addition to meeting retention requirements, during the semester prior to student teaching or earlier, students must pass the final portfolio review per the art education division's portfolio review procedures.

Requirements
Studio and art history courses may be assigned as deficiencies if not taken as part of an undergraduate degree. Subject to approval by the college certification coordinator, courses in art history, ceramics, design, drawing, fiber arts, metal work or jewelry, painting, printmaking, and/or sculpture may be taken at the graduate or undergraduate level, in NIU's School of Art or at other recognized institutions.

ART 342A and ART 342B, Introduction to Art Education: Content and Clinical Experience (3)
ART 344A and ART 344B, Sources of the Art Education: Content and Clinical Experience (3)
ART 345A and ART 345B, Curriculum Development in Art Education: Content and Clinical Experience (3)
ART 463, Application of Aesthetics, Art History, and Criticism in Art Education (3)
ART 488A, Student Teaching in Elementary Art (6)
ART 488B, Student Teaching in Secondary Art (6)
ART 579, Art Education for the Handicapped and Gifted (3)
ART 584, History and Philosophy of Art Education (3)
ART 587, Evaluation in Art Education (3)
EPSY 501, Psychological Foundations of Education (3)
EPSY 508, Theories and Research in Adolescent Behavior (3)

Verification of at least 25 clock hours of clinical experience, beyond that provided in the art methods courses as a teacher aide, substitute, observer, etc., in a K-12 school setting with approval of the visual and performing arts certification coordinator.

Previous undergraduate general education studies must include coursework to satisfy Illinois general education certification requirements. Students should consult the art education graduate certification coordinator.

Master of Arts in Art
Students pursuing the M.A. degree must complete a minimum of 30 semester hours of graduate work and must choose a specialization early in their work toward the degree.

Specialization in Studio Art
Students who select the specialization in studio art must elect a particular area of study in studio courses and pass a portfolio examination for continuance prior to the completion of 15 graduate semester hours.
ART 580, Seminar (3)
Art history electives (6)
Studio art electives (18)
ART 599B, One-Person Show and Documentation for the M.A. Studio Degree (3)

Three copies of a pictorial documentation of the one-person show with four copies of a catalog must be submitted to the Graduate School as the equivalent of a thesis. Guidelines for the documentation of the one-person show are available from the graduate coordinator in the School of Art.

Specialization in Art History
Students who select the specialization in art history must demonstrate a reading knowledge of one modern foreign language by earning an A or B in FLFR 202, FLGE 202, or FLIT 202; receiving a S in FLFR 382 or FLGE 382, or passing an average-proficiency translation examination in French, German, or Italian arranged through the NIU Office of Testing Services, with the concurrence of the student's major adviser, in one of those languages. Though French, German, and Italian are customary, other languages may be substituted on recommendation of the student's Graduate Advisory Committee.

ART 486 as an undergraduate must do so as a graduate student; this work may be for graduate credit.

Master of Fine Arts in Art
Students in the M.F.A. program must complete a minimum of 60 semester hours of graduate work and must choose a particular area of study in studio courses early in their work toward the degree. Students must pass a portfolio examination for continuance prior to the completion of 15 graduate semester hours.
ART 590, Seminar (6)
Art history electives (12)
Studio art electives (39)
ART 699B, One-Person Show and Documentation for the M.F.A. Studio Degree (3)

Three copies of a pictorial documentation of the one-person show with four copies of a catalog must be submitted to the Graduate School as the equivalent of a thesis. Guidelines for the documentation of the one-person show are available from the graduate coordinator in the School of Art.

Foreign Study Programs
The School of Art sponsors a foreign study program designed to investigate, experience and analyze the art and culture of other parts of the world. This program was initiated in 1960 and has featured study tours to all the countries of Western Europe, to Russia, and to China and Japan, as well as to many of the Middle and Near Eastern countries. Residence programs have been sponsored in Italy, France, Austria, and Mexico.

A varied foreign study program is planned for the future. Interested students should contact the chair of the School of Art for current information.

Course List
All art courses designated with the phrase “may be repeated” are repeatable to a maximum number of semester hours to be determined by the student’s major adviser. Credit-hour limitations for other art courses are cited in their descriptions. Course enrollment of more than 6 credit hours per semester in one course requires consent of the School of Art.

ART 409T, Advanced Interactivity (3)
Advanced studies in interactive art with emphasis on structured and individual projects. May be repeated to a maximum of 9 semester hours. PRQ: ART 367T or consent of school.

ART 410T, Studies in Interactive Media (3)
Exploration in interactive art. Topics to be announced. Emphasis on individual projects. May be repeated to a maximum of 9 semester hours. PRQ: ART 409T or consent of school.

420. Design Field Experience (1-6).
A. Media Arts
B. Interior Architecture
C. Visual Communication
D. Photography

Cooperative work experience for design students. 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: Approval of the faculty field experience adviser in the design student's area of study.
463. APPLICATION OF AESTHETICS, ART HISTORY, AND CRITICISM IN ART EDUCATION (3). A thematic and interdisciplinary approach to the application of aesthetic, art historical, and critical theory and methods to instructional practice in museums and elementary and secondary schools. Emphasis on alternative methods of presenting the content of aesthetics, art history, and criticism, and on the use of teacher-made and commercial instructional resources. PRQ: 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 special attention to current issues and practices relating to ethics, collections, exhibitions, and education. Lectures, discussion, museum field trips, museum practicum. Research project. PRQ: Consent of school.

ART 473T. ADVANCED ANIMATION (3). Intensive work in animation using 2-D and/or 3-D techniques. Emphasis on individual projects. May be repeated to a maximum of 9 semester hours. PRQ: ART 373T or consent of school.

476. ART OF THE EASTERN MEDITERRANEAN AND ANATOLIA (3). An analytical study of the art and architecture of the Eastern Mediterranean, Western Asia Minor, Anatolia, and the Levant Coast from the beginning of the Stone Age to the downfall of the Phoenician commercial empire.

480. ALTERNATIVE TEACHING EXPERIENCES (3-12). Internship teaching in community centers, social agencies, and other facilities offering educational programs outside of the public school pattern. Cooperatively supervised field experiences in alternative modes of instruction. PRQ: Successful completion of student teaching or approval of the art education faculty.

483. ART IN ELEMENTARY SCHOOLS (3). Adapting visual arts concepts derived from art history, art criticism, studio arts, and aesthetics as appropriate to the elementary child and the self-contained classroom. Field trip, lecture, studio, critique, and micro teaching experiences. Not open to art majors.

484. INTERRELATED ARTS EDUCATION (3). Exploration of aesthetic concepts pertinent to education in the arts. Analysis of curricular structures that accommodate an education in combined arts and basic assumptions underlying these structures. Planning, developing, and implementing arts programs in the context of visual arts in K-12 educational systems.

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 consent of school.


491. HISTORY OF PRINTS AND GRAPHIC PROCESSES (3). The development of woodcuts, etching, engraving, lithography, etc., in the history of art.

492. CONTEMPORARY ART (3). A study of current art directions, styles and attitudes and their relationships to contemporary society.

493. HISTORY OF ARCHITECTURE III: FROM 1900 (3). The study of building styles, theories, form, and construction as exemplified by the major architectural monuments from 1900 to the present.

496A. HISTORY OF DECORATIVE ARTS: FURNITURE (3). A chronological survey from ancient Egypt through the 20th century.

496B. HISTORY OF DECORATIVE ARTS: MINOR ARTS AND CRAFTS (3). A chronological survey from ancient Egypt through the 20th century.

497. HISTORY OF ARCHITECTURE I: TO 1400 (3). Building styles, theories, form, and construction as exemplified by the major architectural monuments from the ancient world through the end of the Middle Ages.

498. HISTORY OF ARCHITECTURE II: 1400-1900 (3). Building styles, theories, form, and construction as exemplified by the major architectural monuments from the Renaissance through the 19th century.

505. STORE PLANNING (3, 6, or 9). A study in interior space planning with emphasis on problem analysis and detailed problem solution. May be repeated. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

506. RESEARCH IN INTERIOR ARCHITECTURE (3). Examination of theoretical and empirical methodology for research in interior architecture culminating in designing and evaluating interior spaces. May be repeated. PRQ: Consent of school.

507. INTERIOR ARCHITECTURE I (3, 6, or 9). Special problems in interior architecture and space planning stressing preliminary proposals. Topics to be announced. May be repeated. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

509. ELECTRONIC MEDIA DESIGN I (3, 6, or 9). Selected problems in design with emphasis on computer-aided design. May be repeated. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

510. DESIGN (3). Selected problems in design. May be repeated. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

511. VISUAL COMMUNICATION (3 or 6). Advanced problems in visual communication. May be repeated. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

512. STUDIES IN DESIGN (3). Varied topics in design. Studio, lecture, and discussion or field trip. Topics to be announced. May be repeated. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

513. PHOTOGRAPHY I (3-6). Advanced work in photography with emphasis on experimentation and the development of an individual approach. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

520. DRAWING I (3 or 6). Analytical studies of style and structure. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

523. PAINTING I (3, 6, or, with consent of school, 9). The development of individual style in painting. Extended independent study. May be repeated. A student may take two sections (3 credits each) concurrently with the same instructor or with different instructors. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

530. PRINTMAKING I (3 or 6).

A. Intaglio
B. Lithography
C. Relief
D. Serigraphy

533. PRINTMAKING II (3 or 6).

540. DESIGN AND TECHNOLOGY (3). Impact of technology on the theory and practice of the design process from a historical as well as a contemporary viewpoint. Application of technology to design, both as a creative and as a management tool. Demonstrations, lectures, and case studies. PRQ: Consent of school.

541. CERAMICS I (3, 6, or, with consent of school, 9). Exploration of three-dimensional forms using clay and related materials. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

545. TECHNICAL PROBLEMS IN CERAMICS I (3). Theory and laboratory experience in glaze calculation and testing, clay body formulation, properties of glaze oxide, kiln firing, and kiln construction. Study of contemporary and historical examples of ceramics. Lecture and studio. May be repeated. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

551. METALWORK AND JEWELRY I (3, 6, or, with consent of school, 9). Intensive studio work in selected techniques and processes. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

554. MUSEUM ADMINISTRATION (3). Theory and practice of museum administration focusing on governance, legal issues, fund raising, financial and personnel management, planning, public relations, security, and physical facilities. Lectures, case studies, and discussion. PRQ: ART 465 or consent of school.

555. CURATORIAL PRACTICE (3). Philosophy, practices, and issues involved in acquisition and care of collections, including collection policy, registration and cataloging methods, documentation/research of collections, conservation, and ethics. Lectures, case studies, museum visits, and museum practicum. PRQ: ART 465 or consent of school.

556. MUSEUM EXHIBITIONS AND INTERPRETATION (3). Theory and practices of exhibition planning, design, installation, and evaluation with emphasis on the interpretative function of exhibitions through labels, brochures, AV, and interactive devices. Lectures, practical, exhibit...
critiques, class projects, and museum visits. Culminates in an exhibition by the class in an NIU gallery/museum. PRQ: ART 465 or consent of school.

557. 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, four 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.

561. SCULPTURE I (3, 6, or, with consent of school, 9). Advanced individual development through work in various media. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.A. degree program or consent of school.

566. MEDIA STUDIES I (3, 6, or 9). A. Cinematography B. Video Art C. Multi-Image Programming D. Intermedia Arts

Advanced study in media arts with emphasis on individual approaches and independent research. Students may enroll in one, two, or three of the above listed subject areas concurrently, for 3, 6, or 9 credit hours in one of these subject areas, or any combination thereof with a maximum of 9 hours per semester. May be repeated. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

570. FIBER/FABRIC I (3, 6, or 9). A. Weaving B. Printing and Dyeing C. Off-Loom Construction

Intensive studio course in fiber/fabric. May be repeated. Students may enroll in three separate areas concurrently. PRQ: Acceptance into M.A. or M.F.A. degree program, or consent of school.

575. MATERIALS AND RESOURCES IN ART THERAPY (3). Study of the types of expression relevant to the practice of art therapy. Experiential involvement with various art processes, materials, tools, and equipment appropriate to the art therapist. Implementation of information and experiences in a variety of activities. Lecture/discussion, studio, field experiences. PRQ: ART 577 or consent of school.

576. APPROACHES AND TECHNIQUES IN ART THERAPY (3). Study of psychological and philosophical approaches as they relate to and provide foundations for art therapy practice. Exploration of art therapy techniques used in a variety of settings. Direct involvement with approaches and techniques in a variety of activities. Lecture/discussion, studio, and field experiences. PRQ: ART 577 or consent of school.

577. INTRODUCTION TO ART AS A THERAPEUTIC AGENT (3). Survey of the history, theory, and practice of art therapy as related to art and art education. Readings in the literature. Exploration of educational and training opportunities. Individual in-depth problem related to art therapy. Observation of activities demonstrating current art therapy practices. Lecture/discussion, studio, and field observation.

578. CASE STUDIES IN ART THERAPY (3). An introduction to the diagnostic approaches and procedures used in art therapy. The preparation and presentation of case studies. Individual in-depth problem related to case studies. Lecture/discussion and field experience. PRQ: ART 577 or consent of school.

579. ART EDUCATION FOR THE HANDICAPPED AND GIFTED (3). Philosophies, instructional methods, practice, and experience with appropriate materials, resources, and opportunities related to art education in special education. Individual in-depth problem related to art education for the handicapped and gifted. Designed for elementary, secondary, special education, art education, and art therapy majors. Lecture/discussion and field experience.

580. SEMINAR (3). Discussion of historical and contemporary issues in the arts. Topics to be announced. May be repeated.

581. LEARNING THEORY IN ART EDUCATION (3). A study of those theories of learning that are specifically related to the creative experience. The results of this study are applied to the problems of learning and teaching in art education; to questions of method, scope, and sequence in art programs.

582. CURRICULUM DEVELOPMENT IN ART EDUCATION (3). An investigation of cultural, developmental, psychological, and perceptual forces influencing curricular emphases. Analyzing the history and current trends in curriculum development. Learning to structure varieties of curriculum, and to formulate objectives for development of concepts and skills in art.

583. SEMINAR IN ART EDUCATION (3). Investigation and discussion of topics in art education as they relate to issues in the visual arts, society, and education programs.

584. HISTORY AND PHILOSOPHY OF ART EDUCATION (3). Survey and appraisal of the historical and philosophical basis for teaching of art. Consideration of current objectives with implications for change.

585. RESEARCH READINGS IN ART EDUCATION (3). Critical evaluation of primary research. Applying criteria for evaluating: theoretical, descriptive (historical, ethnographic, empirical, and case studies), and experimental research.

586. POLICY STUDIES FOR THE ADMINISTRATION AND SUPERVISION OF ART PROGRAMS (3). An analysis of the historical, social, political, and economic influences on the formation and implementation of art education policy. Examination of the organization, staffing, and administration of art and art-related programs.

587. EVALUATION IN ART EDUCATION (3). Intent, function, and consequences of evaluation in art education. Survey of evaluation of art programs and curricula. Diagnostic, formative, and summative evaluation of art. Methods and instrumentation related to evaluation in art education.

588. ALTERNATIVE METHODS OF INSTRUCTION IN ART (3). Exploration of teaching approaches in art that vary in response to desired outcomes of learning. Use of models in the identification of teaching styles and in obtaining feedback. Planning and teaching for learning situations specific to K-12 art education.

589. TOPICS IN ART (1-6). Concentrated study in art. Studio, lecture and project, and seminar. Topics to be announced. May be repeated for a maximum of 6 semester hours as elective credit to be applied toward an advanced degree with school approval. May not be substituted for art history or seminar.

590. INDEPENDENT STUDY (1-9). Work on individual problems in the student's chosen field. May be repeated. PRQ: Consent of school and instructor.

591. STUDIES IN MEDIEVAL ART (3). Specific topics chosen from the following list. May be repeated, but credit is limited to 3 semester hours per topic.

A. Early Christian and Early Byzantine Art: ca. 330-843
B. Mid-Byzantine and Late Byzantine Art: ca. 843-1453
C. Post-early Christian Art in Western Europe and Romanesque Art: ca. 1000-1200
D. Gothic Art: ca. 1150-1400

592. STUDIES IN ITALIAN RENAISSANCE ART (3). Specific topics chosen from the following list. May be repeated, but credit is limited to 3 semester hours per topic.

A. Early Renaissance Art
B. High Renaissance Art

593. STUDIES IN NORTHERN RENAISSANCE ART (3). Specific topics chosen from the following list. May be repeated, but credit is limited to 3 semester hours per topic.

A. 1300 to ca. 1480
B. Mid-Byzantine and Late Byzantine Art: ca. 843-1453
C. Post-early Christian Art in Western Europe and Romanesque Art: ca. 1000-1200
D. Gothic Art: ca. 1150-1400

594. TOPICS IN BAROQUE AND ROCOCO ART (3). Specific topics to be announced. May be repeated to a maximum of 18 semester hours; however, credit is limited to 3 semester hours per topic.

595. STUDIES IN 19TH CENTURY ART (3). Specific subjects in 19th century art from the time of the French Revolution to ca. 1900. May be repeated, but credit is limited to 3 semester hours per subject.

596. STUDIES IN AMERICAN ART (3). Specific subjects chosen from the development of art in America from ca. 1670 to the present. May be repeated, but credit is limited to 3 semester hours per subject.

598. STUDIES IN ORIENTAL ART (3). Specific topics chosen from the following list. May be repeated, but credit is limited to 3 semester hours per topic.

A. Chinese Art
B. Japanese Art
C. Indian and Southeast Asian Art
D. Islamic Art

599A. THESIS (1-3).

599B. ONE-PERSON SHOW AND DOCUMENTATION FOR THE M.A. STUDIO DEGREE (1-3).
600. STUDIES IN ANCIENT ART (3). Specific topics chosen from the following list. May be repeated, but credit is limited to 3 semester hours per topic.
   A. Egyptian Art
   B. Mesopotamian Art—Near East
   C. Aegean Art: Minoan/Mycenaean
   D. Classical Art: Greece
   E. Etruscan and Roman Art

601. SEMINAR IN ART HISTORY (3). Investigation of specific topics in art history. Topics to be announced. May be repeated but credit is limited to 3 semester hours per topic.

602. STUDIES IN LATIN-AMERICAN ART (3). Specific subjects chosen from the arts of Central or South America. May be repeated, but credit is limited to 3 semester hours per subject.

603. INDEPENDENT STUDY IN THE HISTORY OF ART (3). Individual research in special problems and original subjects in art history as determined by the student and adviser. May be repeated. PRQ: Permission of adviser.

604. STUDIES IN AFRICAN, OCEANIAN, AND NATIVE AMERICAN ART (3). Specific subjects chosen from the arts of Africa, Oceania, or the Americas. May be repeated, but credit is limited to 3 semester hours per subject.

605. STUDIES IN 20TH CENTURY ART (3). Specific subjects chosen from the development of contemporary art from ca. 1900 to the present. May be repeated, but credit is limited to 3 semester hours per topic.

606. STUDIES IN 20TH CENTURY ART (3). Specific subjects chosen from the development of contemporary art from ca. 1900 to the present. May be repeated, but credit is limited to 3 semester hours per subject.

607. INTERIOR ARCHITECTURE II (3, 6, or 9). Advanced problems in interior architecture including both commercial and domestic fields. May be repeated. PRQ: Acceptance into M.F.A. degree program or consent of school.

608. ELECTRONIC MEDIA DESIGN II (3, 6, or 9). Advanced research problems in computer-aided design. May be repeated. PRQ: Acceptance into M.F.A. degree program or consent of school.

609. PHOTOGRAPHY II (3 or 6). The investigation of creative problems in photography through extended independent study. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.F.A. degree program or consent of school.

610. DRAWING II (3 or 6). Advanced problems in drawing. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.F.A. degree program or consent of school.

611. SCULPTURE II (3, 6, or, with consent of school, 9). Individual studies in selected media. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.F.A. degree program or consent of school.

612. RESEARCH AND VISUAL COMMUNICATION (3 or 6). Research in specialized laboratory problems. May be repeated. PRQ: Acceptance into M.F.A. degree program or consent of school.

613. TECHNICAL PROBLEMS IN CERAMICS II (3). Advanced theory and laboratory experience in glaze calculation and testing, clay body formulation and testing, engobe formulation, properties of glaze oxide, kiln firing, and kiln construction. Research into contemporary and historical examples of ceramics. Lecture and studio. May be repeated. PRQ: Acceptance into M.F.A. degree program or consent of school.

614. TECHNICAL PROBLEMS IN CERAMICS II (3). Advanced theory and laboratory experience in glaze calculation and testing, clay body formulation and testing, engobe formulation, properties of glaze oxide, kiln firing, and kiln construction. Research into contemporary and historical examples of ceramics. Lecture and studio. May be repeated. PRQ: Acceptance into M.F.A. degree program or consent of school.

615. METALWORK AND JEWELRY II (3, 6, or, with consent of school, 9). Emphasis on expression and competence of execution in individualized studio work. May be repeated. Student may enroll in two separate sections concurrently. PRQ: Acceptance into M.F.A. degree program or consent of school.

616. PHOTOGRAPHY II (3, 6, or 9).
   A. Weaving
   B. Printing and Dyeing
   C. Off-Loom Construction

617. INTERIOR ARCHITECTURE II (3, 6, or 9). Advanced problems in interior architecture including both commercial and domestic fields. May be repeated. PRQ: Acceptance into M.F.A. degree program or consent of school.

618. TECHNICAL AND HISTORICAL RESOURCES OF THE ARTIST: PAINTING, DRAWING, PRINTMAKING (3). The media and processes of the artist and their historical significance. The study emphasizes selected techniques from the 14th through 20th centuries. Studio and lecture. PRQ: Consent of school.

619. TECHNICAL AND HISTORICAL RESOURCES OF THE ARTIST: ADVANCED INDEPENDENT STUDY (3). In-depth research and/or studio application in specific historical techniques. May be repeated to a maximum of 12 semester hours. PRQ: Consent of school. Recommended: ART 628.

620. PRINTMAKING II (3 or 6).
   A. Intaglio
   B. Lithography
   C. Relief
   D. Serigraphy

621. CERAMICS II (3, 6, or, with consent of school, 9). Individual technical exploration and professional development in clay and related materials. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.F.A. degree program or consent of school.

622. TEACHING ART AT THE COLLEGE LEVEL: INTERNSHIP (3). Teaching at the college level under the supervision of a master teacher. May not be used to meet the credit-hour requirements for the M.A. degree with a specialization in studio art or for the M.F.A. degree.

623. PAINTING II (3, 6, or, with consent of school, 9). Individual development of style. Extended independent study. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.F.A. degree program or consent of school.

624. TEACHING ART AT THE COLLEGE LEVEL: INTERNSHIP (3). Teaching at the college level under the supervision of a master teacher. May not be used to meet the credit-hour requirements for the M.A. degree with a specialization in studio art or for the M.F.A. degree.

625. CLINICAL INTERNSHIP IN ART THERAPY (3). Practicum in a clinical, rehabilitative, or educational setting with a registered art therapist. Cooperatively supervised contact with a variety of clients as well as related activities. Must be taken concurrently both terms with ART 688 to a maximum of 6 semester hours. PRQ: Successful completion of course work and school approval. CRQ: ART 688 or consent of school.

626. DOCTORAL SEMINAR IN ART EDUCATION (1). An analysis of selected problems and issues in art education. May be repeated to a maximum of 4 semester hours, but credit is limited to 1 hour each semester. PRQ: Admission to the Ed.D. program in curriculum and instruction.

627. TEACHING ART AT THE COLLEGE LEVEL: INTERNSHIP (3). Teaching at the college level under the supervision of a master teacher. May not be used to meet the credit-hour requirements for the M.A. degree with a specialization in studio art or for the M.F.A. degree.

628. TECHNICAL AND HISTORICAL RESOURCES OF THE ARTIST: ADVANCED INDEPENDENT STUDY (3). In-depth research and/or studio application in specific historical techniques. May be repeated to a maximum of 12 semester hours. PRQ: Consent of school. Recommended: ART 628.

629. TECHNICAL AND HISTORICAL RESOURCES OF THE ARTIST: ADVANCED INDEPENDENT STUDY (3). In-depth research and/or studio application in specific historical techniques. May be repeated to a maximum of 12 semester hours. PRQ: Consent of school. Recommended: ART 628.

630. PRINTMAKING II (3 or 6).
   A. Intaglio
   B. Lithography
   C. Relief
   D. Serigraphy

631. CERAMICS II (3, 6, or, with consent of school, 9). Individual technical exploration and professional development in clay and related materials. May be repeated. Students may enroll in two separate sections concurrently. PRQ: Acceptance into M.F.A. degree program or consent of school.

632. CLINICAL INTERNSHIP IN ART THERAPY (3). Practicum in a clinical, rehabilitative, or educational setting with a registered art therapist. Cooperatively supervised contact with a variety of clients as well as related activities. Must be taken concurrently both terms with ART 688 to a maximum of 6 semester hours. PRQ: Successful completion of course work and school approval. CRQ: ART 688 or consent of school.

633. DOCTORAL SEMINAR IN ART EDUCATION (1). An analysis of selected problems and issues in art education. May be repeated to a maximum of 4 semester hours, but credit is limited to 1 hour each semester. PRQ: Admission to the Ed.D. program in curriculum and instruction.

634. RESEARCH METHODS IN ART EDUCATION (3). Methods for conducting theoretical, descriptive, and experimental research including statistical analysis of data. PRQ: ART 581 and ART 585, or consent of school.
685. TOPICS IN ART HISTORY (3). In-depth research on specific artists, movements, periods, or problems in the history of art. Topics to be announced. May be repeated, but credit is limited to 3 semester hours per topic.

688. SUPERVISION SEMINAR IN ART THERAPY (3). Designed for the student engaged in the internship experience. Focus on professional issues involving the role of the art therapist in specialized settings; interface between art therapy and verbal therapy; advanced understanding of graphic language; specific applications and populations; and preparation for presenting art therapy inservices to internship site staff. Must be taken concurrently both terms with ART 682 to a maximum of 6 semester hours. PRQ: Consent of school. CRQ: ART 682.

699B. ONE-PERSON SHOW AND DOCUMENTATION FOR THE M.F.A. STUDIO DEGREE (1-3).
School of Music (MUSC)

Chair: Paul Bauer

Graduate Faculty

Shmuel D. Ashkenasi, professor, Diploma, Curtis Institute of Music
Jan M. Bach, professor, Distinguished Research Professor, D.M.A., University of Illinois
Paul Bauer, associate professor, D.M., Northwestern University
James Berkenstock, professor, Ph.D., Northwestern University
Tim Blickhan, professor, D.M.A., University of Illinois
Robert Chappell, professor, M.M., North Texas State University
Patricia Cichy, assistant professor, Ph.D., New York University
Stephen Duke, professor, M.M., North Texas State University
Robert Fleisher, professor, D.M.A., University of Illinois
William Goldenberg, professor, D.Mus., Indiana University
Robert A. Green, professor, Ph.D., Indiana University
Kuo-Huang Han, professor, Ph.D., Northwestern University
Fareed Haque, associate professor, Ph.D., Northwestern University
Kuo-Huang Han, professor, Ph.D., Northwestern University
Richard T. Holly, assistant chair, associate professor, M.M., East Carolina University
Marc Johnson, professor, M.M., Catholic University of America
G. Allan O'Connor, professor, M.M., University of Illinois
Harold Kafer, professor, Ph.D., University of North Texas
Willi D. Koehler, professor, D.M.A., University of Texas, Austin
Peter Middleton, professor, M.A., University of California, San Diego
Myron Myers, professor, M.M., University of Southern California
G. Allan O'Connor, professor, M.M., University of Illinois
James Phelps, associate professor, D.M.A., University of North Texas
Mark Ponzo, associate professor, D.M.A., Eastman School of Music
Ronald D. Price, professor, Ph.D., University of Toledo
Diane Ragains-Slawin, associate professor, M.M., Chicago Conservatory of Music
Robert Sims, assistant professor, Artistic Diploma, Northwestern University
Stephen E. Squires, professor, M.M., California State University, Northridge
Mathias J. Tacke, professor, Diploma, Northwest German Music Academy
Donald L. Walker, professor, M.S., Juilliard School of Music
Melvin Warner, professor, M.M., University of Southern California
Richard Young, professor, M.M., Catholic University

The School of Music offers graduate majors in music education and in performance and pedagogy leading to the M.M. degree, as well as an individualized M.M. program and a Performer's Certificate. The School of Music is fully accredited by the National Association of Schools of Music.

Master of Music

The M.M. degree requires a minimum of 32 semester hours and may be earned with an area of study in music education, performance and pedagogy in keyboard instruments, voice, or band and orchestral instruments, or with an individually designed program.

Only those persons whose undergraduate preparation has been at least equivalent to the comparable undergraduate music curriculum at NIU will be admitted to an area of study leading to the M.M. degree. Students whose previous work fails to meet these requirements may in some cases be permitted to begin graduate study in music. They will be required, however, to make up any deficiencies, as determined by the School of Music, before being admitted to an M.M. program.

The completion of the degree Bachelor of Music with a performance major is the normal prerequisite for admission to a course of study leading to the M.M. degree with an area of study in performance and pedagogy. Students holding a B.S., B.A., or B.M.E. degree may be eligible, however, if, in the opinion of the music faculty, they have reached the necessary level of proficiency in the major performance area before admission. All students working toward the M.M. degree must perform an audition in their principal performance area and/or meet alternative requirements prescribed in the specific area of study. Students who wish to complete a program of study, including transfer credit, must pass an audition. Students will be considered for secondary private study without audition.

Applicants for the M.M. program are not required to take the GRE General Test; however, all students must take the School of Music Diagnostic Examination prior to admission. As a result of this examination students may be required to take some specific courses for credit as part of their program of study.

Applicants to the master's program in music are normally notified of an admission decision within three weeks of receipt of the completed application.

In partial fulfillment of graduate requirements, a student pursuing the M.M. with an area of study in performance and pedagogy must prepare and perform a full-length public recital. Students pursuing the M.M. with an area of study in music education, upon approval of the graduate faculty, may present a formal public recital; write a thesis, a transcription, or an original composition; or elect a non-thesis option.

Students pursuing the master's program are permitted to take 6 semester hours of selected studies in music (MUSC 619, MUSC 639, MUSC 669, MUSC 689) toward their 32-hour master's degree. Students pursuing the individualized area of study are permitted to take 12 semester hours of selected studies (MUSC 619, MUSC 639, MUSC 669, MUSC 689) toward that 32-hour requirement. With the approval of the School of Music and the office of the dean of the Graduate School, a maximum combined total of 15 semester hours of graduate credit for courses taken at other accredited institutions for which transfer credit is granted, plus credit earned in courses at NIU as a student-at-large may be counted toward meeting the requirements for the M.M. degree. Within this maximum total of 15 semester hours, a maximum of 6 hours of transfer credit may be allowed.

Core Requirements (13)

MUSC 533, Seminar in Musical Research (3), or MUSC 584, Techniques of Research on Music (3), as appropriate to the area of study and as approved by the student's adviser, in consultation with the coordinator of graduate studies.

A course in music history approved by the music history area coordinator in consultation with the music history faculty (3)
A course in music theory approved by the music history area coordinator in consultation with the music theory faculty (3)
MUSC 599A, Final Recital (4),
OR MUSC 599B, Thesis (4),
OR MUSC 599C, Thesis/Final Project (4),
OR MUSC 599D, Thesis/Final Project (4)
One of the following areas of study (19-20)

Music Education (19)
MUSC 585, Foundations of Music Education (3)
Music education course work (7)
MUSC 599A, Final Recital (4),
OR MUSC 599B, Thesis (4),
OR MUSC 599C, Thesis/Final Project (4),
OR MUSC 599D, Thesis/Final Project (4)
One of the following areas of study (19-20)

Electives (6)

Performance and Pedagogy (19)
One of the following tracks

Band and Orchestral Instruments
Private instrumental study (8)
Ensembles (3)
MUSC 591, Instrumental Ensemble (1)
Additional ensemble courses (2)
One of the following
MUSC 464, Workshop in the Feldenkrais Method for the Performing Arts (3)
MUSC 570, Music Instructional Techniques and Materials: Woodwinds (2)
MUSC 571, Music Instructional Techniques and Materials: Brasses (2)
MUSC 572, Music Instructional Techniques and Materials: Percussion (2)
MUSC 574, Music Instructional Techniques and Materials: Strings (2)
Electives (5-6)

Keyboard Instruments
Private keyboard study (6)
MUSC 565, Accompanying (1)
MUSC 591J, Keyboard Ensemble (1)
One of the following (11)
Solo performance and pedagogy
Private keyboard study (2)
MUSC 538, Seminar in Piano Literature (2),
OR MUSC 539, Seminar in Organ Literature (2),
MUSC 575A, Keyboard Methods and Materials: Piano (3),
OR MUSC 575B, Keyboard Methods and Materials: Harpsichord (3)
OR MUSC 575C, Keyboard Methods and Materials: Organ Electives (4)

Accompanying and chamber music
MUSC 537, Chamber Music Studies (3)
MUSC 565, Accompanying (1)

MUSC 591J, Keyboard Ensemble (1)
Electives (6)

Voice
Private voice study (8)
MUSC 581, Pedagogy of Singing (3)
MUSC 590B, Opera Workshop (1)
MUSC 590A, Chamber Choir (1),
OR MUSC 590B, Opera Workshop (1),
OR MUSC 595, Master Class (1)
Electives (6)

Individualized Study (19)
A student may design an individualized area of study with course work selected from existing courses, seminars, independent study, internships, or special projects, offered both on and off campus. While this individual area of study may share some features of other areas of study, its thrust should be distinctive. Individualized study may consist in part of interdisciplinary or multidisciplinary courses which combine music study with such areas as anthropology, art, business, computer science, dance, theater, electronics, ethnic studies, mental health, or special education; or they may concentrate entirely on music. Examples of individualized study areas pursued by M.M. students include music history, music theory, composition, world music, jazz, recording techniques, and computer music and new media technology.

After satisfying published Graduate School and School of Music requirements for admission, the applicant must demonstrate qualifications for this program in at least one of the following ways.
Demonstration of outstanding musicianship in a performance audition.
Demonstration of creative ability through written compositions, tapes, or improvisations.
Demonstration of scholarly competence in music history, music theory, or music teaching through the submission of investigative or research papers.
A distinctive record of professional achievement.

When competence in a selected field, other than music, is not evident at the time of application, provisional acceptance may be granted, provided deficiencies are removed in accordance with Graduate School time limits.

After acceptance, each student will be assigned an adviser with whom he or she will prepare an individualized proposal. This proposal must be approved by a committee representing the School of Music, which may in turn seek the advice of another department whose courses are included in the proposal. Normally, at least one half of the individualized area of study will be in the School of Music. At the conclusion of study, the student must substantiate to the committee that the specified goals have been met.

Performers Certificate

The Performer's Certificate program is a 24-semester-hour post-master's program which includes private instruction, ensemble experience, research related to performance, a master class, lecture-recital, and two full recitals, the second of which is prepared independently by the candidate without applied coaching or instruction. The purpose of the program is to develop fully independent professional musicians. Because the program is highly specialized and concentrated, all requirements (with the exception of the Final Recital) are expected to be completed in consecutive semesters.

Applicants for the Performer's Certificate program should consult with the School of Music chair or coordinator of graduate studies. To be eligible for admission, students must normally have completed work equivalent to that required for the M.M. degree at NIU. Applicants are not required to take the GRE general test; however, they will be required either to perform an audition, or submit a cassette recording representative of their performance ability.

The Performer's Certificate is not a formal graduate degree. In some cases, students who demonstrate exceptional performing abilities, abilities equivalent to a Master of Music level or beyond, and who have completed a baccalaureate degree from an accredited institution or an appropriate diploma from a recognized conservatory or music school, may be recommended by the faculty of the School of Music for admission directly into the Performer's Certificate program.

Requirements
Private Study (8)
Ensemble (2)
MUSC 691, Supervised Recital Research Seminar (3)
MUSC 692, Supervised Recital (2)
MUSC 693, Lecture-Recital Research Seminar (3)
MUSC 694, Lecture-Recital (2)
MUSC 695, Master Class (1)
MUSC 696, Final Recital (3)
Cooperative Education/Internship Program in Music

Master of Music candidates are eligible to submit an application for cooperative education/internship experience. Those students selected may participate in full- or part-time assignments with approved organizations whose functions are complimentary to the students' career goals. Variable S/U credit hours are assigned on the basis of the length and/or nature of the experience. Credit applies towards music elective credit requirements. Students are limited to a maximum of 4 semester hours of cooperative education/internship credit in the School of Music. Students in any M.M. program (including those in the individualized major) may apply for the Cooperative Education/Internship Program.

Interested students must consult with a faculty member closely associated with the appropriate field. The student then applies to the School of Music for participation in Northern's Cooperative Education/Internship Program. Applications must be approved by the chair of the School of Music and the graduate coordinator. Enrollment in this program must be reflected in the student's program of courses by enrollment in MUSC 690. Applications will be reviewed on the basis of GPA, instructor recommendation(s), professional promise, and demonstrated interest and competence in the area of study. The student must possess a minimum 3.00 overall GPA. All students (including transfer students) must have completed a minimum of 9 semester hours of graduate-level course work in the School of Music.

Although academically supervised by School of Music faculty, all internships are coordinated by the Cooperative Education/Internship Program. The latter office requires completion of an application and resume.

Course List

690. INTERNSHIP IN MUSIC (1-4).
   A. Composition and Arranging
   B. Recording Techniques
   C. Performance
   D. Music Industry
   E. Music Education

Cooperatively supervised, full- or part-time professional field experience with approved organizations or individuals, to provide a learning experience complementary to the student's anticipated career goals. May be repeated to a maximum of 4 semester hours. S/U grading. PRQ: Consent of school.

Music History and Literature

421. TOPIC STUDIES IN ETHNOMUSICOLOGY (3). Studies and reports on special topics in world music: bibliography, discography, instruments, etc. May be repeated to a maximum of 6 semester hours. PRQ: MUSC 324 or MUSC 325, or consent of school.

422. JAZZ HISTORY (3). Significant changes and developments in jazz. Analysis of the styles of a number of jazz performers. PRQ: MUSC 202 or consent of school.

423. BLACK MUSIC (3). An historical examination of black music from 1619 to the present. Analysis of musical styles including blues, rag, jazz, rhythm and blues, and soul, within the social and cultural context of American life.

426. AMERICAN MUSIC IN THE CONCERT TRADITION (3). The development of solo, chamber, symphonic, and choral music, and opera from the Moravians of colonial America to the American experimental composers of the 20th century. PRQ: MUSC 322 or consent of school.

427. AMERICAN MUSIC IN THE FOLK AND POPULAR TRADITIONS (3). A survey of vernacular and popular music. Since colonial times including folk songs and spirituals, the music of New England tunesmiths, music for social and entertainment purposes, and an introduction to the music of native Americans.

431. MUSIC OF SOUTHEAST ASIA (3). Study of the music of Southeast Asia with emphasis on the music of Indonesian gamelan.

432. MUSIC OF CHINA (3). Study of the music of China with emphasis on existing genres.

435. ORGAN LITERATURE I (2). A survey of organ literature from 1300 to 1800, excluding the works of J. S. Bach. PRQ: MUSC 202 or consent of school.

436. ORGAN LITERATURE II (2). A survey of the organ works of J. S. Bach and classical, romantic, and contemporary literature. PRQ: MUSC 202 or consent of school.

437. PIANO LITERATURE I (2). A survey of clavier and piano literature to the mid-19th century. PRQ: MUSC 202 or consent of school.

438. PIANO LITERATURE II (2). A survey of romantic and contemporary piano literature. PRQ: MUSC 202 or consent of school.

439. GUITAR LITERATURE (2). A survey of lute, vihuela, and guitar literature from the Renaissance to the present. PRQ: MUSC 202 or consent of school.

521. MUSIC HISTORY REVIEW I (2). The development of western art music from its origins to 1750. 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.

522. MUSIC HISTORY REVIEW II (2). The development of western art music from 1750 to 1900. 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.

523. 20TH CENTURY IDIOMS I (3). Musical developments from 1890 to 1950; impressionism, primitivism; expressionism; jazz influences; early serial techniques.

527. THE RENAISSANCE (3). Music in the Renaissance (ca. 1450-1660), with study of representative styles.

528. BAROQUE IDIOMS AND STYLES (3). Selected studies in music of the baroque period.

529. THE CLASSIC ERA (3). European music from ca. 1730-1820. PRQ: MUSC 321 and MUSC 322, or consent of school.

530. THE ROMANTIC ERA (3). European music from ca. 1820-1900. PRQ: MUSC 321 and MUSC 322, or consent of school.

531. 20TH CENTURY IDIOMS II (3). Historical, organizational, and theoretical aspects of avant garde and experimental compositions, including electronic and computer music. PRQ: MUSC 523 or consent of school.

533. SEMINAR IN MUSICAL RESEARCH (3). The technique of writing and speaking about music. Reading and critical evaluation of writings about music. Survey of resources for musical research, such as reference materials and the means of locating sources and editions.

534. SEMINAR IN MUSIC HISTORY AND LITERATURE (3). Research and analysis in selected areas of music history and literature. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

537. CHAMBER MUSIC STUDIES (3). Independent studies in chamber music analysis and performance practices.

599B. THESIS (1-4). The preparation and completion of a thesis. May be repeated to a maximum of 4 semester hours.

621. OPERATIC LITERATURE (3). The history and development of the opera from the Florentine camerata to the present.

622. SYMPHONIC LITERATURE (3). A study of orchestral music, with stress on the symphony and solo concerto. Analytical techniques applied to selected works.

639. SELECTED STUDIES IN MUSIC HISTORY AND LITERATURE (1-4). Independent or small-group study of selected topics. Participation in more than one independent study per semester permitted by consent of school chair. May be repeated to a maximum of 20 semester hours. See specific degree requirements for limitations. PRQ: Consent of school.
Music Theory and Composition

400. RECORDING TECHNIQUES (3). Laboratory study of the techniques of professional recording as applied directly to all phases of musical storage and reproduction. Emphasis on gaining expertise with microphones, acoustics, multitrack recording, professional mixing techniques, etc. PRQ: Consent of school.

401. ADVANCED RECORDING PROJECTS (3). Continuation of MUSC 400. Microphone theory and applications, audio console operation including, but not restricted to, signal processing, monitor mixing, overdubbing, and multitrack techniques; preparation of master tape suitable for disc recording; some study of current practices in digital recording and console automation. May be repeated to a maximum of 9 semester hours. PRQ: MUSC 400 or consent of school.

407. MODAL COUNTERPOINT (3). Class performance, analysis, and writing of counterpoint in Renaissance style as exemplified by works of such composers as Josquin, Lassus, Palestrina, and others. Preliminary study of Gregorian chant. PRQ: MUSC 202 or consent of school.

408. FORM AND ANALYSIS (3). The presentation of the standard historical forms of tonal music and the development of technical skills necessary to analyze tonal compositions. Emphasis on the development of analytical technique. PRQ: MUSC 202 or consent of school.

409. TONAL COUNTERPOINT (3). Class performance, analysis, and writing of counterpoint as employed in 18th century style. PRQ: MUSC 202 or consent of school.

410. PASSACAGLIA, CANON, AND FUGUE (3). The passacaglia, canon, and fugue as found in all types of musical forms and in all musical periods, past and present. PRQ: MUSC 202 or consent of school.

411. 20TH CENTURY TECHNIQUES (3). Aural study, analysis, and practical application of such 20th century compositional devices as modality, dissonant counterpoint, polytonality, atonality, serialism, tone clusters, polychords, improvisation, aleatoric techniques, graphic notation, multiphonics, and others. PRQ: MUSC 202 or consent of school.

412. DEVELOPMENT AND PRACTICE OF ELECTRONIC MUSIC (3). A 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: MUSC 202 or consent of school.

418. PHYSICS OF MUSICAL INSTRUMENTS AND SOUND (3). The science of musical sound and the physical principles involved in the production of music by the various instruments and the voice. Elements of architectural acoustics of music rooms and acoustical engineering of electronic recorders and reproducers. Open to nonmusic majors by consent of school.

500. COMPOSITION: SECONDARY (1). Selected studies in the techniques of composing for acoustic media. Not open to composition majors. May be repeated to a maximum of 12 semester hours. PRQ: Consent of school.

501. MUSIC THEORY REVIEW (2). Review of harmony, analytical techniques, part-writing procedures, and listening strategies necessary for graduate-level study of tonal music. Does not satisfy graduate music theory requirements for any degree program. Credit earned does not count toward the M.M. degree or Performer's Certificate.

504. SEMINAR IN THEORY AND COMPOSITION (3). Projects and studies in theory and composition. Topic to be announced. May be repeated to a maximum of 6 semester hours.

505. ORCHESTRATION (3). The scoring of original and other works for various combinations of instruments as well as one complete score for full symphony orchestra. PRQ: Consent of school.

507. WIND AND PERCUSSION SCORING (3). Scoring for diverse wind and percussion ensembles. PRQ: Consent of school.

509. JAZZ ARRANGING I (2). Scoring techniques for jazz and popular ensembles. PRQ: MUSC 202 and MUSC 205, or consent of school.

510. JAZZ ARRANGING II (2). Continuation of MUSC 509. Advanced scoring techniques for jazz and popular ensembles. PRQ: MUSC 509 or consent of school.


512. ELECTRONIC AND COMPUTER MUSIC II (2). Further study and experimentation with techniques introduced in MUSC 511, Electronic and Computer Music I. Emphasis on implementing techniques studied thus far in more extensive electronic music compositions. PRQ: MUSC 511 and consent of school.

518. TONAL ANALYTICAL TECHNIQUES (3). Study and application of theoretical principles and analytical techniques appropriate to the music of the 17th, 18th, and 19th centuries.

599C. THESIS/FINAL PROJECT (1-4). The preparation and completion of a thesis or final project, the choice to be approved by the School of Music graduate faculty. May be repeated to a maximum of 4 semester hours.

600. COMPOSITION: PRIMARY (2). Individualized and/or group study and writing of small and large musical forms. May be repeated. PRQ: Major in composition or consent of school.

601. EVOLUTION OF HARMONIC THEORIES (3). Music theory from antiquity through the present.

611. ELECTRONIC AND COMPUTER MUSIC III (2). 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 musical works. PRQ: MUSC 512 and consent of school.

612. ELECTRONIC AND COMPUTER MUSIC IV (2). Further study and experimentation with algorithmic composition. Emphasis on creating more expansive computer music systems through the integration of hardware and software. PRQ: MUSC 611 and consent of school.

619. SELECTED STUDIES IN MUSIC THEORY (1-4). Independent or small-group study of selected topics. Participation in more than one independent study per term permitted by consent of school chair. May be repeated to a maximum of 20 semester hours. See specific degree requirements for limitations. PRQ: Consent of school.

Music Performance

462. SURVEY OF THE MUSIC INDUSTRY (2). A 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.

464. WORKSHOP IN THE FELDENKRAIS METHOD FOR THE PERFORMING ARTS (3). Crosslisted as TH-D 464X. Lectures, demonstrations, and related activities regarding the Feldenkrais method as it applies to the training of performing artists. May be repeated to a maximum of 12 semester hours. PRQ: Consent of school.

563. SPECIAL CONTEMPORARY PERFORMANCE SKILLS: EXPERIMENTAL MUSIC (2). Analysis and class performance of experimental music including the development of skills related to the interpretation of modernized and invented notation, improvisation, and verbal instruction. PRQ: Consent of school.

567. DICTION FOR PIANISTS I (2). Italian and introductory German pronunciation, using the International Phonetic Alphabet as a basis. Faculty-supervised vocal coaching in class and at rehearsals. Enrollment limited to graduate keyboard Area 2 students.

569. DICTION FOR PIANISTS II (2). Continuing German, and French pronunciation, using the International Phonetic Alphabet as a basis. Faculty-supervised vocal coaching in class and at rehearsals. Enrollment limited to graduate keyboard Area 2 students. PRQ: MUSC 567 or consent of school.

599A. FINAL RECITAL (1-4). The preparation and completion of a graduate recital. May be repeated to a maximum of 4 semester hours.

669. SELECTED STUDIES IN MUSICAL PERFORMANCE (1-4). Independent or small-group study of selected topics. Participation in more than one independent study per term permitted by consent of school chair. May be repeated to a maximum of 20 semester hours. See specific degree requirements for limitations. PRQ: Consent of school.
LECTURE-RECITAL (2). Preparation and presentation of an approximately 60-minute recital. PRQ: Admission to the Performer’s Certificate program. CRQ: MUSC 693 and MUSC 694.

LECTURE-RECITAL RESEARCH SEMINAR (3). Guided research and presentations related to the repertoire for the student's instrument and supervised recital. PRQ: Admission to the Performer's Certificate program. CRQ: MUSC 694 and MUSC 695.


FINAL RECITAL (3). Independent preparation and performance of an approximately 75-minute recital, without applied instruction or coaching. PRQ: MUSC 693, MUSC 694, and MUSC 695, or consent of school.

ADVISORY INSTRUMENTAL TECHNIQUES AND CONDUCTING (3). Advanced problems in baton techniques and score reading and the analysis of graded band and orchestra literature.

ADVISORY CHORAL TECHNIQUES AND CONDUCTING (3). A practical exposition of all facets of choral directing, effective rehearsal procedures, score study, and organization of choral ensembles.

SEMINAR IN PIANO LITERATURE (2). A focused study of a major component of the piano literature, including research, analysis, and discussion of performance practices. Topics to be announced. May be repeated to a maximum of 6 semester hours.

SEMINAR IN ORGAN LITERATURE (2). In-depth study of Baroque, Romantic, and Contemporary organ literature through research, analysis, and discussion of performance practices in the organ music of selected representative composers. PRQ: MUSC 435 or MUSC 436, or consent of school.

SEMINARY IN PIANO LITERATURE (2). A focused study of a major component of the piano literature, including research, analysis, and discussion of performance practices. Topics to be announced. May be repeated to a maximum of 6 semester hours.

SEMINARY IN ORGAN LITERATURE (2). In-depth study of Baroque, Romantic, and Contemporary organ literature through research, analysis, and discussion of performance practices in the organ music of selected representative composers. PRQ: MUSC 435 or MUSC 436, or consent of school.

SEMINARY IN ORGAN LITERATURE (2). In-depth study of Baroque, Romantic, and Contemporary organ literature through research, analysis, and discussion of performance practices in the organ music of selected representative composers. PRQ: MUSC 435 or MUSC 436, or consent of school.

ADVANCED INSTRUMENTAL TECHNIQUES AND CONDUCTING (3). Advanced problems in baton techniques and score reading and the analysis of graded band and orchestra literature.

ADVANCED CHORAL TECHNIQUES AND CONDUCTING (3). A practical exposition of all facets of choral directing, effective rehearsal procedures, score study, and organization of choral ensembles.

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598. WORLD MUSIC ENSEMBLE (1).
A. Gamelan
B. African Ensemble
C. Steel Band I
D. Steel Band II
E. All-University Steel Band
F. Tabla

Observation of and participation in university keyboard classes. Consent of school; 4 semester hours credit per term. May be repeated to a maximum of 24 semester hours. PRQ: Consent of school.

643. HARP: PRIMARY (2 or 4). Individual study in the student's major medium of performance. Two semester hours credit per term for students in the music education course of study; 4 semester hours credit per term (two in summer) for students in the performance and pedagogy course of study. May be repeated to a maximum of 24 semester hours. PRQ: Consent of school.

Band and Orchestral Instruments: Primary

645. VIOLIN: PRIMARY (2 or 4)
646. VIOLA: PRIMARY (2 or 4)
647. VIOLONCELLO: PRIMARY (2 or 4)
648. CONTRABASS: PRIMARY (2 or 4)
649. GUITAR: PRIMARY (2 or 4)
650. FLUTE: PRIMARY (2 or 4)
651. OBOE: PRIMARY (2 or 4)
652. CLARINET: PRIMARY (2 or 4)
653. SAXOPHONE: PRIMARY (2 or 4)
654. BASSOON: PRIMARY (2 or 4)
655. TRUMPET: PRIMARY (2 or 4)
656. FRENCH HORN: PRIMARY (2 or 4)
657. TROMBONE: PRIMARY (2 or 4)
658. TROMBONE: PRIMARY (2 or 4)
659. PERCUSSION: PRIMARY (2 or 4)

Individual study in the student's major medium of performance. Two semester hours credit per semester for students in the music education course of study; 4 semester hours credit per semester (2 in summer) for students in the performance and pedagogy course of study. May be repeated to a maximum of 24 semester hours. PRQ: Consent of school.

Music Education

566. PRACTICUM IN STUDIO INSTRUCTION (1). Supervised studio teaching in keyboard, voice, or band and orchestral instruments. May be repeated to a maximum of 12 semester hours. PRQ: Consent of school.

570. MUSIC INSTRUCTIONAL TECHNIQUES AND MATERIALS: WOODWINDS (2). Techniques of class and individual instruction in orchestral woodwind instruments, with emphasis on intermediate and advanced levels. Review and evaluation of solo, ensemble, and other instructional literature for all levels.

571. MUSIC INSTRUCTIONAL TECHNIQUES AND MATERIALS: BRASSES (2). Techniques of class and individual instruction in orchestral brass instruments, with emphasis on intermediate and advanced levels. Review and evaluation of solo, ensemble, and other instructional literature for all levels.

572. MUSIC INSTRUCTIONAL TECHNIQUES AND MATERIALS: PERCUSSION (2). Techniques of individual and class instruction in the percussion instruments. Review and evaluation of solo and ensemble material at all levels.

573. MUSIC INSTRUCTIONAL TECHNIQUES AND MATERIALS: ELECTRONIC MUSIC (3). Techniques of class instruction in electronic instruments with emphasis on advanced tape recorder usages in elementary and secondary schools.

574. MUSIC INSTRUCTIONAL TECHNIQUES AND MATERIALS: STRINGS (2). Techniques of class and individual instruction in orchestral stringed instruments, with emphasis on intermediate and advanced levels. Review and evaluation of solo, ensemble, and other instructional literature for all levels.

575. KEYBOARD METHODS AND MATERIALS (3).
A. Piano
B. Harpsichord
C. Organ

The methods and materials used in keyboard teaching either in the public schools or privately. Class keyboard methods, organization and materials. Observation of and participation in university keyboard classes.

577. SEMINAR IN SUZUKI PEDAGOGY (1-3). Study of the philosophy, psychology, repertoire, and pedagogy of the Suzuki Method including guided observation and supervised teaching. May be repeated to a maximum of 12 semester hours. PRQ: Consent of school.

578. CURRENT TRENDS IN ELEMENTARY MUSIC EDUCATION (3). A detailed study of the conceptual and behavioral approaches to the elementary general music program. Evaluation of current methods and materials.

580. WORKSHOP IN MUSIC (1). Concentrated study of particular topics of interest in music. Enrollment in more than one workshop per term is permitted. No more than 3 semester hours of workshop credit may be applied to any M.M. program.

581. PEDAGOGY OF SINGING (3). Techniques and procedures of teaching singing. Emphasis on how the singing voice works and practical methods for achieving proper function. PRQ: Permission of the School of Music.


584. TECHNIQUES OF RESEARCH IN MUSIC (3). The nature of research and scientific method; application to problems in music and music education; problem of definition; development of a research design; probability and sampling procedure; specialized techniques for the location, collection, quantification and treatment of data. Required for the M.M. degree with a major in music education.

585. FOUNDATIONS OF MUSIC EDUCATION (3). The historical and philosophical bases of music education. The application of learning theories to problems of music teaching. Required for the M.M. degree with a major in music education.

589. SEMINAR IN MUSIC EDUCATION (3). Investigation of specific issues in the various areas of music education. Topics to be announced. May be repeated to a maximum of 6 semester hours.

599D. THESIS/FINAL PROJECT (1-4). The preparation and completion of a thesis or final project, the choice to be approved by the School of Music graduate faculty. May be repeated to a maximum of 4 semester hours.

675. PSYCHOLOGY OF MUSIC (3). The functions of the music mind and the factors involved in the development of musical skills and maturity.

689. SELECTED STUDIES IN MUSIC EDUCATION (1-4). Independent or small-group study of selected topics. Participation in more than one independent study per term permitted by consent of school chair. May be repeated to a maximum of 20 semester hours. See specific degree requirements for limitations. PRQ: Consent of school.
School of Theatre Arts (THEA, TH-D)

Chair: Gene Terruso

Graduate Faculty

Alexander F. Adducci, professor, M.A., Northern Illinois University
Judith Q. Chitwood, associate professor, M.A., University of Cincinnati
Lila Doyle, professor, M.S., Indiana University
Jo Anne S. Fox, professor, M.A., Northwestern University
Paula Frasz, associate professor, M.F.A., University of Illinois
Kent G. Gallagher, professor, Ph.D., Indiana University
Kathryn Gately-Poole, associate professor, M.F.A., Rutgers University
Christopher Jones, associate professor, Ph.D., Ohio State University
Michael Kachingwe, assistant professor, M.F.A., University of Iowa
Terrence McClellan, associate professor, M.F.A., University of Massachusetts
Randall Newsom, associate professor, M.A., Eastern Kentucky University
Melanie Parks-Baumgartner, associate professor, M.F.A., University of Illinois
Patricia Ridge, associate professor, Ph.D., University of Colorado
Deborah Robertson, assistant professor, M.F.A., Smith College
Kevin L. Seligman, professor, M.A., San Jose State College
Gene Terruso, professor, M.F.A., Rutgers University
Mark C. Williams, assistant professor, M.F.A., University of Cincinnati

The School of Theatre Arts offers graduate programs leading to the M.A. and M.F.A. degrees. Its programs are accredited by the National Association of Schools of Theatre.

Master of Arts in Theatre Arts

The M.A. program is an initial graduate degree in theatre, broadening and deepening the student's understanding of theatre arts beyond the baccalaureate degree level. The program includes scholarly study and independent research. Beyond required courses, students select electives or an area of study suited to their needs, terminal degree plans, or career goals. The degree is a research-oriented program developed in consultation with a faculty advisor. Areas of study the student may select include theatre history and drama, dramaturgy, teaching of theatre, theatre management, playwriting, and other theatre fields.

Admission

Admission to the M.A. program requires a baccalaureate degree, preferably with a major in theatre. Students holding the baccalaureate degree in other fields may be eligible for admission to the program if they can demonstrate their ability to proceed at an advanced level. Students entering the M.A. program in theatre arts are expected to have acquired basic knowledge and skills in both the performing arts and the production aspects of theatre. They are expected to have a demonstrable ability in the analysis of dramatic literature and an awareness of the place of theatre in the cultural life of western civilization. For dance courses, students must have a demonstrable ability in either ballet or modern dance.

Requirements

THEA 501, Bibliography and Research Techniques in Theatre Arts (3)
THEA 570, Seminar: Theatre History (6)
THEA 570E, Seminar: Theatre History: Contemporary Theatre (3)
THEA 580, Theatrical Criticism (3)
Electives or area of study (9)
Satisfactory completion of a written comprehensive examination.
Satisfactory completion of a thesis (6)
The student will be required to present an oral defense of the thesis.

Master of Fine Arts in Theatre Arts

The M.F.A. program is designed to provide intensive artistic training in theatre arts for students preparing for careers in theatre and theatre-related areas. Students will graduate with a specialization in acting, directing, or design and technology (the latter with areas of study in costume design, lighting design, scene design, and theatre technology).

Admission

An applicant must normally hold a baccalaureate or master's degree in theatre arts, with adequate experience in the specialization the applicant wishes to pursue as an M.F.A. candidate.

Applicants for the specialization in design and technology must submit a portfolio of their work. Applicants for the acting specialization are required to audition. Applicants for the directing specialization must submit a director's analysis of a play they have directed. Applicants for the acting and the design and technology specializations are not required to take the General Test of the GRE.

All applicants must submit a statement of their reasons for seeking admission to the program.

Applicants who appear qualified on the basis of the above qualifications will be invited to a personal interview with a school admission committee. Favorable recommendation by the committee is required for admission.

Candidacy

Upon admission, students embark on a probationary year, during which they must successfully complete course work and a major artistic project. In order to achieve candidacy, they must receive positive faculty evaluation for the work completed during this period.

Requirements

A minimum of 60 semester hours of credit (including internship and project). Normally a minimum of three consecutive academic years of full-time enrollment is required to complete the degree. A reduction may be approved for students who enter the program with substantial transfer credit.

Three major artistic projects in an area of study or specialization, including a final project.
Completion of the following core program of study (19)
THEA 501, Bibliography and Research Techniques in Theatre Arts (3)
THEA 566, The Business of the Theatre (1)
Course work from the following in consultation with adviser (6)
THEA 570, Seminar: Theatre History (3-6)
THEA 576, Script Laboratory (2-6)
Courses outside the student’s designated area approved by the school (9)
An internship (3-9 semester hours) or an equivalent experience prior to graduation.
Students in the specializations of acting and directing are required to complete the internship with the school in one of the following specializations.

A final project (requiring enrollment in THEA 699), supported by a project paper, that is reviewed and approved by a committee of the faculty. The project may be done in conjunction with an internship.
The nature of the final examination will be determined by the student’s advisory committee.
Completion of a minimum of 29 semester hours in consultation with the school in one of the following specializations.

With the consent of the School of Theatre Arts and the office of the dean of the Graduate School, no more than 21 semester hours of transfer credit from other accredited institutions and student-study by advisement course work from the student’s designated area approved by the school (9)

Electives by advisement

Specialization in Acting
THEA 507A, Text Analysis for Acting: Poetic Realism (2)
THEA 507B, Text Analysis for Acting: Comic Techniques (2)
THEA 508, Acting Techniques (3)
THEA 509A, Advanced Voice and Diction: Freeing the Voice (1)
THEA 509B, Advanced Voice and Diction: Building the Voice (1)
THEA 509C, Advanced Voice and Diction: Voice Characterization (1)
THEA 509D, Advanced Voice and Diction: Musical Theatre Performance (1)
THEA 510A, Advanced Acting: The Actor’s Inner Life (3)
THEA 510B, Advanced Acting: Clarity and Character (3)
THEA 510C, Advanced Acting: New Play Studio (3)
THEA 511A, Advanced Movement: Relaxation and Response (1)
THEA 511B, Advanced Movement: Expression and the Body (1)
THEA 511C, Advanced Movement: Specificity (1)
THEA 606, Audition and Interview Techniques (2)
THEA 608, Verse Drama (4)
THEA 610, Acting Studio: On-Camera (1-4)
Electives by advisement

Specialization in Directing
THEA 508, Acting Techniques (3)
THEA 512, Directing Techniques (3)
THEA 514, Directing Techniques II (3)
THEA 612, Directing Studio (1-12)
THEA 613, Directing Laboratory (1-3)
Electives by advisement

Specialization in Design and Technology
THEA 549, Design and Technology Laboratory (4)
Select by advisement course work from the student’s designated area of study (25)

Costume Design
THEA 478, Period Style for the Theatre I (3)
THEA 479, Period Style for the Theatre II (3)
THEA 535, Advanced Costume Design I (3)
THEA 536, Advanced Costume Design II (3)
THEA 537, Advanced Costume Technology (3)
THEA 649, Design Studio (9)

Lighting Design
THEA 478, Period Style for the Theatre I (3)
THEA 479, Period Style for the Theatre II (3)
THEA 541, Advanced Lighting I (3)
THEA 542, Advanced Lighting II (3)
THEA 545, Advanced Scene Technology (3-9)
THEA 648, Technology Studio (3-12)
THEA 649, Design Studio (9)

Scene Design
THEA 478, Period Style for the Theatre I (3)
THEA 479, Period Style for the Theatre II (3)
THEA 543, Advanced Scene Technology (3-9)
THEA 546, Advanced Scene Technology I (3)
THEA 547, Advanced Scene Technology II (3)
THEA 644, Scene Design Craft (3)
THEA 649, Design Studio (9)

Theatre Technology
THEA 513, Advanced Stage Management (3)
THEA 535, Advanced Costume Technology (9), or THEA 545, Advanced Scene Technology (9)
THEA 648, Technology Studio (12)

Electives by advisement

Course List

Theatre (THEA)

404. STAGE COMBAT (2). Introduction to the fundamental skills of 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.

414. PROBLEMS IN CREATIVE DRAMATICS (3). A presentation of the theory of creative dramatics through a survey of research and methodological literature. Laboratory practice in creative dramatics and dramatic play with children will be required.

415. READERS THEATER (3). Dramatic literature and poetry for ensemble stage presentation. Emphasis on the compilation and direction of scripts.

416. CHAMBER THEATRE (3). The adaptation, direction, and presentation of narrative literature for group interpretation performances in the theatre. PRQ: THEA 312 or consent of school.

419. PERFORMANCE (1-3). An 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.

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 AutoVise or 3D Studio. May be repeated to a maximum of 6 semester hours. PRQ: THEA 450 or consent of school.

460. EDUCATIONAL THEATRE METHODS (3). The place of the teacher of theatre in the secondary school. The organization, content, material, and procedure for teaching theatre as a curricular subject and as an extracurricular program within the educational system.

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.

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. May be repeated to a maximum of 6 semester hours.

478. PERIOD STYLE FOR THE THEATRE I (3). An 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). An intensive investigation of period style from the Baroque through contemporary as it relates to theatrical production. Exploration of period clothing, manners, decor, and architecture.

490. SUMMER REPERTORY PRACTICUM (3). Extensive and concentrated production experience in the preparation and performance of summer theatre repertory. Emphasis on the unique problems of concentrated production experience in the preparation and performance architecture.

491. BIBLIOGRAPHY AND RESEARCH TECHNIQUES IN THEATRE ARTS (3). Philosophy of and approach to graduate study. Review of historical, critical, and experimental methods as they apply to advanced degree programs; consideration of thesis and artistic project papers: preparation of bibliographies, prospectuses, and reports.

501. TEXT ANALYSIS FOR ACTING (2).
A. Poetic Realism
B. Comic Techniques
Exploration of text analysis methods as they apply to dramatic works by such authors as Ibsen, Strindberg, Wilde, Chekhov and Shaw, and to comic texts from Roman comedy through the Renaissance. PRQ: Admission to the M.F.A. specialization in acting or consent of school.

502. ACTING TECHNIQUES (3). Study in contact and truthful response, conversational reality, concentration, spontaneity, getting in touch with one's own behavior and that of others.

503. ADVANCED VOICE AND DICTION (1).
A. Freeing the Voice
B. Building the Voice
C. Voice Characterization
D. Musical Theatre Performance
In-depth voice study including voice production, voice characterization, IPA, verse, dialects, musical theatre performance, and specialized topics. PRQ: Admission to the M.F.A. specialization in acting or consent of school.

504. ADVANCED ACTING (3).
A. The Actor's Inner Life
B. Clarity and Character
C. New Play 
D. Specificity
In depth stage movement studies including character work, combat, and specialized topics. PRQ: Admission to the M.F.A. specialization in acting or consent of school.

505. DIRECTING TECHNIQUES (3). Exploration of directing as an art form. Study of directorial processes: analysis, research, conceptualization, designer interaction, rehearsal processes, and performance study.

506. ADVANCED STAGE MANAGEMENT (2). Advanced study of the stage manager in theatrical production. Examination of the prompt script, coordination of production personnel, and the management responsibilities in the rehearsal, rehearsal, and performance periods.

507. DIRECTING TECHNIQUES II (3). Working with the actor: casting, table work, and rehearsal. Practical applications of these techniques. PRQ: THEA 512 or consent of school.

508. SEMINAR: DESIGN AND TECHNOLOGY (3).
A. History of Costume
B. History of the Physical Theatre
C. Theatre Planning
The subject of this seminar will change from semester to semester. May be repeated to a maximum of 9 semester hours.

509. DESIGN AND TECHNOLOGY LABORATORY (1). The development of skills and creative tools necessary for specific fields in design and technology. May be repeated to a maximum of 6 semester hours. PRQ: Admission to the M.F.A. program or consent of school.

510. THE BUSINESS OF THE THEATRE (1). Studies of contracts, taxes, unions, agencies, and other subjects relevant to the actor, director, designer, and technician.

511. SEMINAR: THEATRE HISTORY (3).
A. Greek and Roman Theatre
B. Medieval, Elizabethan, and Jacobean Theatre
C. 17th and 18th Century Theatre
D. 19th and 20th Century Theatre (until 1968)
E. Contemporary Theatre
F. Special Topics
The subject and materials of this seminar will change from semester to semester. May be repeated to a maximum of 18 semester hours.

512. SCRIPT LABORATORY (2). The study of theatre and drama in special periods and genres. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

513. SEMINAR IN THEATRE RESEARCH (3). An intensive investigation of a single significant dramatic form or theatrical phenomenon. The selection of each topic will be made on the basis of current research needs and will be announced prior to each semester. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

514. THEATRICAL CRITICISM (3). The major contributors to the arts of dramatic and theatrical criticism from the Greeks to the present day as they have influenced dramatic and theatrical practices.


516. PLAYWRITING II (3). Advanced theory and practice of writing plays. Emphasis on the writing of long complete works. May be repeated to a maximum of 9 semester hours. PRQ: THEA 581 or consent of school.
595. INTERNSHIP IN THEATRE ARTS (1-9). Off-campus experience opportunities with selected organizations in theatre. Limited to qualified students. May be repeated to a maximum of 9 semester hours. S/U grading. PRQ: Consent of school.

597. DIRECTED INDIVIDUAL STUDY IN THEATRE ARTS (1-3). Independent study of problems in any area of theatre. May be repeated to a maximum of 8 semester hours. PRQ: Consent of school.

599. THESIS (1-6). Open only to students writing a thesis in an M.A. program. May be repeated to a maximum of 6 semester hours. PRQ: Consent of the student's graduate adviser.

606. AUDITION AND INTERVIEW TECHNIQUES (2). The study and practice of audition and interviewing techniques used by the professional actor.

608. VERSE DRAMA (4). Integrated voice and performance work on scenes and monologues from Greek to Elizabethan drama. PRQ: Admission to the M.F.A. specialization in acting or consent of school.

610. ACTING STUDIO: ON-CAMERA (1-3). Artistic projects requiring acting for film and/or video. May be repeated to a maximum of 4 semester hours.

612. DIRECTING STUDIO (1-3). Development of skills in analysis, research, staging, and production; the study of directing styles and the directors who developed them. Practical application of techniques and research. May be repeated to a maximum of 12 semester hours.

613. DIRECTING LABORATORY (1). Individualized development of techniques of directing. May be repeated to a maximum of 3 semester hours.

616. ADVANCED ACTING LABORATORY (1-3). Individualized development of techniques of acting. May be repeated to a maximum of 8 semester hours.

644. SCENE DESIGN CRAFT (3). The development of proficiencies in the essential crafts associated with the process of designing for the scene. PRQ: M.F.A. candidacy.

648. TECHNOLOGY STUDIO (3). Individualized development of technical proficiency and creativity of fields of theatre technology. May be repeated to a maximum of 12 semester hours. PRQ: M.F.A. candidacy.

649. DESIGN STUDIO (3). Individualized development in technical proficiency and aesthetics in costume, scene, and lighting design. May be repeated to a maximum of 12 semester hours. PRQ: M.F.A. candidacy.

699. FINAL PROJECT (1-6). Artistic projects undertaken by M.F.A. candidates. Includes analysis, completion of the project, oral examination, final project documentation. PRQ: M.F.A. candidacy and consent of student’s graduate adviser.

Dance Performance (TH-D)

405. BALLET IV (2). Concentration on complex ballet techniques for performance. May be repeated to a maximum of 16 semester hours. Proficiency required for admission to this course.

406. MODERN DANCE IV (2). Concentration on complex modern dance techniques for performance. Emphasis on movement quality and interpretative performance elements. May be repeated to a maximum of 16 semester hours. Proficiency required for admission to this course.

408. POINTE II (1). Advanced pointe techniques. May be repeated to a maximum of 8 semester hours. Proficiency required for admission to this course. CRQ: TH-D 405 or consent of school.

409. PAS DE DEUX (2). Partnering techniques and principles in classical ballet. May be repeated to a maximum of 8 semester hours. CRQ: TH-D 305 or TH-D 405, or consent of school.

420. SEMINAR IN DANCE (1). Practical application of studies to business, artistic, and academic development in the profession. PRQ: Consent of school.

464X. WORKSHOP IN THE FELDENKRAIS METHOD FOR THE PERFORMING ARTS (3). MUSC 464. Lectures, demonstrations, and related activities regarding the Feldenkrais Method as it applies to the training of performing artists. S/U grading. PRQ: Consent of the School of Music.

467. DANCE NOTATION I (3). A theoretical and practical introduction to notation. The analysis and recording of movement through the systems of Labanotation or Benesh Movement Notation. Equal emphasis placed on reading and writing dance scores. Recommended: Knowledge of intermediate-level ballet vocabulary.

468. DANCE NOTATION II (3). Continuation of Dance Notation I, including floor work and group scoring. Emphasis on reading of dance scores and recording movement in Labanotation or Benesh Movement Notation. PRQ: TH-D 467 or consent of school.

474. DANCE PHILOSOPHY AND AESTHETICS (3). The philosophy of dance including aesthetic principles and critical evaluations of varying dance forms and styles.

477. SPECIAL STUDIES IN DANCE (2). A. Spanish B. Mid-Eastern C. Advanced Theatrical Jazz D. Character E. Female Classical Variations J. Male Classical Variations M. Tap Improvisation N. Repertory Q. Other Studies in dance forms. Open to students who qualify for specialized study. May be repeated to a maximum of 10 semester hours.

488. CHOREOGRAPHY II (2). Continued analysis of the elements of choreographic forms, styles, and trends with the development of dance studies of extended length; consideration of the theory and technique of advanced group work. May be repeated to a maximum of 4 semester hours. PRQ: TH-D 388 or consent of school.

496. TUTORIAL IN DANCE (1-3). Directed individual study in special areas of dance. May be repeated to a maximum of 6 semester hours.
Center for Biochemical and Biophysical Studies

Director: John L. A. Mitchell

Faculty Associates
Mitchell Altschuler, associate professor of biological sciences, Ph.D.
Gary M. Baker, associate professor of chemistry and biochemistry, Ph.D.
Neil W. Blackstone, assistant professor of biological sciences, Ph.D.
W. Elwood Briles, adjunct professor of biological sciences, Ph.D.
Theresa B. Conway, associate professor of biological sciences, Ph.D.
Sandra A. Cyriax, associate professor of biological sciences, Ph.D.
Gary R. Coover, professor of psychology, Ph.D.

James V. Corwin, associate professor of psychology, Ph.D.
James E. Erman, professor of chemistry and biochemistry, Distinguished Research Professor, Ph.D.
Josephine Umoren, associate professor of family, consumer, and nutrition sciences, Ph.D.

Sondra L. King, associate professor of family, consumer, and nutrition sciences, Distinguished Research Professor, Ph.D.

Mitchell Altschuler, associate professor of biological sciences, Ph.D.
Gary M. Baker, associate professor of chemistry and biochemistry, Ph.D.
Neil W. Blackstone, assistant professor of biological sciences, Ph.D.
W. Elwood Briles, adjunct professor of biological sciences, Ph.D.
Theresa B. Conway, associate professor of biological sciences, Ph.D.
Sandra A. Cyriax, associate professor of biological sciences, Ph.D.
Gary R. Coover, professor of psychology, Ph.D.

James V. Corwin, associate professor of psychology, Ph.D.

Sondra L. King, associate professor of family, consumer, and nutrition sciences, Distinguished Research Professor, Ph.D.

Mitchell Altschuler, associate professor of biological sciences, Ph.D.
Gary M. Baker, associate professor of chemistry and biochemistry, Ph.D.
Neil W. Blackstone, assistant professor of biological sciences, Ph.D.
W. Elwood Briles, adjunct professor of biological sciences, Ph.D.
Theresa B. Conway, associate professor of biological sciences, Ph.D.
Sandra A. Cyriax, associate professor of biological sciences, Ph.D.
Gary R. Coover, professor of psychology, Ph.D.

James V. Corwin, associate professor of psychology, Ph.D.
Center for Burma Studies

Director: Richard M. Cooler

Faculty Associates

Richard M. Cooler, professor of art, Ph.D.
U Saw Tun, associate professor of foreign languages and literatures, M.A.
May Kyi Win, assistant professor of university libraries, curator, Donn V. Hart Southeast Asian Collection, Dip. Lib.

The Center for Burma Studies was established in 1987 as a repository for multivarious materials on Burma (Myanmar). The purpose of the Center for Burma Studies is to encourage and promote the scholarly study of Burma. The establishment of the center was made possible by the selection of NIU as the national repository for valuable Birmanica items and the appointment of a director to oversee the collections and to organize national and international gatherings.

Since its inauguration the bibliographic and art holdings have quadrupled with a bequest from the private collection of Jerry Paul Bennett. Among the over 12,000 items in various Burmese collections are an impressive map series, located in the Davis Hall Map Library and the Rare Book Room of Founders Memorial Library.

The Burma Gallery in the NIU Museum exhibits selections from the permanent collection on a continuous basis as well as hosting visiting exhibitions. The center publishes The Journal of Burma Studies and distributes other relevant material including the Burma Studies Group Bulletin. The biennial Burma Studies Colloquium brings international scholars and Burma watchers to NIU. The center also collaborates with the (national) Association for Asian Studies to hold conjunctive annual meetings.

The Southeast Asian Collection located in Founders Memorial Library contains published works, periodicals, microfilm, and microfiche concerning Burma. These volumes offer the researcher considerable intellectual challenge and opportunity from their broad base of subject matter, time span, and cultural perspective. 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 a concentration in Southeast Asian studies which may then be listed on the student’s transcript.

The center supports 25 courses at NIU which offer significant opportunity to understand more of the anthropology, art history, economics, history, linguistic origin, literature, music, political science, and cultural development of Burma. In addition, the center supports the acquisition of funds for graduate students including Fulbright, FLAS, Luce, and private foundation grants. A Burmese librarian and a Burmese linguist have recently been hired.

The work of the center and the significance of its bequests have brought international recognition to NIU.

Center for Governmental Studies

Director: Charles E. Trott

Faculty Associates

James M. Banovetz, professor of political science, Ph.D.
Paul Culhane, associate professor of political science, Ph.D.
John D. Esseks, professor of political science, Ph.D.
Steven Nord, professor of economics, Ph.D.
Michael Peddle, associate professor of political science, Ph.D.
Irene Rubin, professor of political science, Ph.D.
Mark Skidmore, assistant professor of economics, Ph.D.
Judy Temple, assistant professor of economics, Ph.D.
Charles E. Trott, professor of geography, Ph.D.
Virginia Wilcox-Gök, assistant professor of economics, Ph.D.
Joseph P. Yaney, professor of management, Ph.D.

The Center for Governmental Studies is a multidisciplinary research and public service organization. It is charged with promoting, coordinating, and administering research programs concerned with public affairs and policy issues, and with providing public service to governments at all levels, private enterprises, and public-private partnerships.

The center is not a degree-granting unit, but cooperates closely with a number of academic departments throughout the university. Through its externally funded projects, the center provides graduate students from a wide variety of disciplines with unique opportunities to become involved with research and technical assistance programs.
Center for Plant Molecular Biology

Director: Thomas L. Sims

Faculty Associates
Mitchell Altschuler, associate professor of biological sciences, Ph.D.
Gary M. Baker, associate professor of chemistry and biochemistry, Ph.D.
W. Elwood Briles, adjunct professor of biological sciences, Ph.D.
Jozef J. Bujarski, professor of biological sciences, Presidential Research Professor, Ph.D.
Sonya Conway, professor of biological sciences, Ph.D.
Thomas P. Conway, associate professor of biological sciences, Ph.D.
James E. Erman, professor of chemistry and biochemistry, Distinguished Research Professor, Ph.D.
T. Daniel Griffiths, professor of biological sciences, Ph.D.
Arnold E. Hampel, professor of biological sciences and chemistry and biochemistry, Distinguished Research Professor, Ph.D.
Laszlo Hanzely, professor of biological sciences, Distinguished Teaching Professor, Ph.D.
T. Daniel Griffiths, professor of biological sciences, Ph.D.
Peter Jablonski, professor of biological sciences, Ph.D.
Gabriel P. Holbrook, associate professor of biological sciences, Ph.D.
Michael E. S. Hudspeth, professor of biological sciences, Ph.D.
Barbara Johnson-Wint, associate professor of biological sciences, Ph.D.
Rangaswamy Meganathan, professor of biological sciences, Ph.D.
John L. A. Mitchell, professor of biological sciences and professor of chemistry and biochemistry, Distinguished Research Professor, Ph.D.
Neil O. Polans, associate professor of biological sciences, Ph.D.
Thomas L. Sims, associate professor of biological sciences, Ph.D.
Paul D. Sorensen, professor of biological sciences, Ph.D.
Joel P. Stafstrom, associate professor of biological sciences, Ph.D.
Marvin J. Starzyk, adjunct professor of biological sciences, Ph.D.
Ronald Toth, professor of biological sciences, Ph.D.
Patricia S. Vary, professor of biological sciences, Distinguished Research Professor, Ph.D.
Linda S. Yasui, associate professor of biological sciences, Ph.D.

The Center for Plant Molecular Biology promotes and coordinates graduate study and research in plant molecular biology. Interaction among faculty members enhances the development of interdisciplinary approaches to the solution of specific research objectives. Faculty in the center utilize state-of-the-art equipment in elucidating molecular mechanisms influencing gene expression in plants. Activities of the center link the university's biotechnology research to the needs of local and national businesses and industries. The transfer of technology from the laboratory into industrial and commercial applications constitutes the conclusion of the center's research process. An autonomous unit, the center is affiliated with the Departments of Biological Sciences and Chemistry and Biochemistry; graduate degrees are obtained through the affiliated instructional departments.

Center for Southeast Asian Studies

Director: Clark D. Neher

Faculty Associates
Richard M. Cooler, professor of art, Ph.D.
Lee S. Dutton, Southeast Asia librarian, M.A.L.S.
Kuo-Huang Han, professor of music, Ph.D.
John F. Hartmann, professor of foreign languages and literatures, Ph.D.
George M. Henry, associate professor of computer science, Ed.D.
Patricia B. Henry, associate professor of foreign languages and literatures, Ph.D.
Dwight Y. King, associate professor of political science, Ph.D.
Judy Ledgerwood, assistant professor of anthropology, Ph.D.
Andrea Molnar, assistant professor of anthropology, Ph.D.
Arlene B. Neher, director of liberal arts and sciences external programming, Ph.D.
Clark D. Neher, professor of political science, Presidential Teaching Professor, Ph.D.
Grant Olson, information technology manager, Ph.D.
Chalermsee Olson, assistant professor of university libraries, M.A.
Barbara Posadas, associate professor of history, Ph.D.
Ronald Provencher, professor of anthropology, Ph.D.
Susan D. Russell, associate professor of anthropology, Ph.D.
Harold E. Smith, professor emeritus of sociology, Ph.D.
M. Ladd Thomas, professor of political science, Ph.D.
Saw Tun, associate professor of foreign languages and literatures, M.A.
Constance Wilson, professor of history, Ph.D.
May Kyi Win, assistant professor of university libraries, curator of
Donn V. Hart Southeast Asian Collection, Dip. Lib.
Edwin Zehner, publications editor/research associate, M.A.
Robert Zerwekh, associate professor of computer science, Ph.D.

Founded in 1963, the center is charged with coordinating academic courses dealing with Southeast Asia and with developing and administering other programs in the university which are concerned with this area. These programs include sponsoring conferences and lectures involving visiting scholars; exchange programs with Southeast Asian universities; assisting in the expansion of the Southeast Asia Library Collection; obtaining and administering funds for graduate students (including FLAS fellowships) and faculty research; operating a publications program on Southeast Asia; and advising students interested in a Southeast Asia concentration.

Concentration in Southeast Asian Studies
Since the center is not a degree-offering unit, all graduate degrees are obtained through the departments, whose special requirements must be met. A student earning a graduate degree may, with the consent of the departmental adviser, also take a concentration of courses in Southeast Asian studies. Completion of the concentration will be noted on the student's transcript.

At the master's level, the concentration requirements are met by the successful completion of four graduate courses (excluding thesis credit) dealing with Southeast Asia, at least two of which must be offered by departments other than that in which the student is earning a degree; demonstrated competence in a Southeast Asian language (equivalent to one year's course work); and the satisfactory completion of a thesis, if required by the department, or a special paper in lieu thereof, on a Southeast Asian topic.
At the doctoral level, the concentration requirements are met by the successful completion of six graduate courses (excluding dissertation credit) dealing with Southeast Asia, at least three of which must be offered by departments other than that in which the student is earning a degree; demonstrated proficiency (equivalent to two years' course work) in a Southeast Asian language other than one's native language; and the satisfactory completion of a doctoral dissertation on a Southeast Asian topic.

The specific Southeast Asian courses which the student is permitted to take as part of the concentration requirements are selected in consultation with the departmental adviser. Departments currently participating are anthropology, art, English (TESOL), foreign languages and literatures, geography, history, music, political science, and sociology. Students in the M.B.A. program may also pursue this concentration.

**Southeast Asian Courses**

- ANTH 407, Peoples and Cultures of Insular Southeast Asia (3)
- ANTH 408, Peoples and Cultures of Mainland Southeast Asia (3)
- ANTH 521, Advanced Topics in a Southeast Asian Ethnology (3)
- ANTH 527, Southeast Asian Peasant Economy (3)
- ANTH 528, Religion and Cosmology in Southeast Asia (3)
- ANTH 590 A-J, Independent Study in Anthropology (1-3)
- ANTJ 590 A-J, Seminar in Anthropology (3)
- ART 487, Southeast Asian Art (3)
- ART 598C, Studies in Oriental Art: Indian and Southeast Asian Art (3)
- ART 603, Independent Study in the History of Art (3)
- FLIN 421, Introduction to Indonesian Literature (3)
- FLIS 481, Independent Study in a Foreign Language (Indonesian, Lao, Javanese, Malay, and Thai) (1-6)
- GEG 558, Readings in Geography (1-3)
- GEG 571 A-J, Independent Research (1-3)
- HIST 446, History of Thailand (3)
- HIST 447, History of Burma (3)
- HIST 448, History of Indonesia (3)
- HIST 449, History of Malaysia and Singapore (3)
- HIST 462, The Vietnam War (3)
- HIST 560, Reading Seminar in Asian History (3)
- HIST 636J, Independent Study: Asian History (3)
- HIST 660, Research Seminar in Asian History (3)
- MUSC 421, Topic Studies in Ethnomusicology (3)
- MUSC 431, Music of Southeast Asia (3)
- MUSC 598A, World Music Ensemble: Gamelan (1)
- POLS 432, Public Administration in Southeast Asia (3)
- POLS 562, Seminar in Political Culture (3)
- POLS 567, Seminar in Political Development (3)
- POLS 568, Seminar in the Political Economy of Developing Areas (3)
- POLS 570, Reading Seminar in Southeast Asian Politics (3)
- POLS 573N, Foreign Area Politics: Thailand (3)
- POLS 573R, Foreign Area Politics: Indonesia (3)
- POLS 587, Southeast Asia and International Politics (3)
- POLS 600D, Research Seminar in Political Science: Comparative Politics (3)
- PSPA 572, Administrative Problems of Less Developed Countries (3)
- SOCI 457, Comparative Family Systems (3)
- SOCI 559, Social Structure and Development (3)

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**Social Science Research Institute**

**Director:** J. Harvey Smith

**Faculty Associates**

Charles Cappel, associate professor of sociology, Ph.D.

John D. Esseks, professor of political science, Ph.D.

Ronald C. Fernald, professor of geology, Ph.D.

Richard Greene, assistant professor of geography, Ph.D.

Paul J. Klepner, professor of history and political science, Distinguished Research Professor, Ph.D.

John Lewis, associate director, Center for Governmental Studies, Ph.D.

David Marcotte, research associate, Social Science Research Institute, Ph.D.

Janet McConney, assistant director, Public Opinion Laboratory, Ed.D.

William C. McCready, associate professor of sociology, Ph.D.

Mark Meher, associate professor of anthropology, Ph.D.

Jon D. Miller, professor of political science, Ph.D.

Jeffrey Mirel, associate professor of leadership and educational policy studies, Ph.D.

Michael Peddle, associate professor of political science, Ph.D.

J. Harvey Smith, associate professor of history, Ph.D.

Ann Sorenson, Senior Fellow, Social Science Research Institute, Ph.D.

Judy Temple, associate professor of economics, Ph.D.

Charles E. Trott, professor of geography, Ph.D.

Fahui Wang, assistant professor of geography, Ph.D.

Virginia Wilcox-Gok, associate professor of economics, Ph.D.

Joseph P. Yaney, professor of management, Ph.D.

The Social Science Research Institute (SSRI) is a multidisciplinary research organization charged with developing and administering social science research and public service programs, and with securing external funding to support them. The institute acts as a central support office that supervises and coordinates a number of programs and centers. These include the Center for Agriculture in the Environment, the Center for Governmental Studies, the Office of Social Policy Research, the Public Opinion Laboratory, and other externally funded social science research projects.

While oriented towards external research and public service, the institute cooperates closely with the university’s academic departments, awarding research assistantships and offering instruction in methodology and computer skills to students and to faculty. The institute offers unique opportunities to broaden and enhance learning, training, and employment opportunities.

The institute supports the university’s mission in both applied and basic research and in public service for the region and state. SSRI centers receive substantial external funding for the university in exchange for their services. As part of its activities, the institute also maintains a large social science data archive and provides students and faculty with access to national data collections such as the Inter-university Consortium for Political and Social Research and the Roper Center.

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*To be decided on a case by case basis by the director of the Center for Southeast Asian Studies and the student’s primary adviser.

1Graduate students enrolling in the following courses will not receive graduate credit for them but may use them to fulfill the language requirement of the Southeast Asian concentration: FLBU 103-FLBU 104, Beginning Burmese, and FLBU 203-FLBU 204, Intermediate Burmese; FLCH 103-FLCH 104, Beginning Chinese, and FLCH 203-FLCH 204, Intermediate Chinese; and FLTH 203-FLTH 204, Intermediate Thai; and FLST 381-FLST 382, Special Studies in Language (Advanced Indonesian and Thai).

2All departments are eligible to participate after approval by the center.

3Courses may meet the concentration requirements when they include substantial treatment of Southeast Asia.
Other Academic Units

International Programs

Executive Director: Manfred Thullen, Ph.D.

The Division of International Programs supervises and coordinates the international activities of the university.

Study Abroad Office

The university provides varied opportunities for graduate students to study and to conduct thesis research abroad. During the summer the Division of International Programs, in association with various university departments and colleges, sponsors specialized study abroad (overseas) programs for academic credit. In the past these opportunities have been offered in a wide range of areas of study in various countries. New programs are developed regularly. Summer programs are mainly in English. During the regular academic year, the Division of International Programs also conducts on behalf of the university a few graduate student exchange arrangements with foreign universities. Students considering this opportunity must have written permission from the Graduate School. Exchanges are designed to add to and supplement study and research opportunities available on campus.

Information is also provided on grants for research abroad as well as overseas teaching opportunities. Moreover, the Division of International Programs supervises graduate student applications for Fulbright-Hays Doctoral Dissertation Research Abroad Program grants (administered by the U.S. Department of Education), the Fulbright Graduate Study and Research Program grants (administered by the Institute of International Education), and the National Security Education Program grants (administered by the Academy for Educational Development). The office conducts the screening processes for these programs on behalf of the university.

IDSP 401. STUDY ABROAD PROGRAMS (1-9). Course work undertaken as part of an approved university study abroad program. May be repeated to a maximum of 9 semester hours.

International Student and Faculty Office

Director: Mark D. Thackaberry, M.B.A.

The International Student and Faculty Office currently advises some 1000 international (foreign) students and faculty from approximately 97 countries. It provides information about NIU programs to prospective international students, admits international undergraduate students, and works with the Graduate School in the admission of international graduate students. A full orientation program is offered with additional advising on registration, financial, and immigration requirements. Regular monitoring of student progress and linkage with faculty assists in the student's adjustment to the university and cultural change.
University Libraries

Director: Arthur P. Young

Faculty

Byron Anderson, associate professor, M.L.S. & M.A., University of Wisconsin, Milwaukee
Mary C. Anderson, assistant professor, M.A., Northern Illinois University
William Baker, professor, M.L.S., University of Loughborough, M.Phil. & Ph.D., University of London
David Brossart, assistant professor, M.L.S., University of Missouri, M.S., Southern Illinois University
Lee S. Dutton, Jr., assistant professor, A.M.L.S., University of Michigan, M.A., University of Hawaii
Michael Gabriel, associate professor, Library Science Specialist, University of Wisconsin, M.S.L.S., University of Illinois
Mary Frances Grosch, assistant professor, M.S.L.S. & M.B.A., Northern Illinois University
Lorraine Hancombe, assistant professor, M.S. & Ph.D., University of Illinois
Deanne Holzerlein, associate professor, M.L.S., Oklahoma University, Ph.D., University of Michigan
Karen Hoyde, assistant professor, M.A., Northern Illinois University
Samuel T. Huang, professor, M.A. & M.S., Northern Illinois University
Jitka Hurych, associate professor, M.A., Northern Illinois University, M.A., Purkyne (formerly Masaryk) University, Czechoslovakia
Dorothy Jones, associate professor, M.L.S., University of California, Berkeley, M.R.E., Union Theological Seminary
Charles Larry, assistant professor, M.A. & M.F.A., Northern Illinois University
David F. Lonergan, associate professor, M.A., Western Washington University, M.S.L.S., University of North Carolina, Ph.D., Pennsylvania State University
Rebecca A. Martin, assistant professor, M.L.I.S., University of Wisconsin, Milwaukee, M.A., Kent State University
T. J. Lusher, assistant director, assistant professor, M.A., University of Iowa
Doris A. Miller, associate director, assistant professor, M.L.S., University of Pittsburgh
Chalermsee Olson, assistant professor, M.A., Northern Illinois University, University of Pittsburgh
Nestor L. Osorio, associate professor, M.A. & M.L.S., State University of New York, Geneseo
Julin Pan, assistant professor, M.A.L.S. & Ph.D., University of Arizona
Joseph J. Parot, professor, M.A., DePaul University, Ph.D., Northern Illinois University
Thomas A. Peters, associate director, associate professor, M.A., University of Missouri, Kansas City, M.A., University of Iowa
Kenneth J. Potts, assistant professor, M.A., Vanderbilt University, A.M.L.S., University of Michigan
Elaine C. Rast, professor, M.A.L.S., Rosemary College
Marita M. Renschaw, assistant professor, M.A., Northern Illinois University
Robert B. Marks Ridinger, associate professor, M.L.S., University of Pittsburgh, M.A., Case Western Reserve University
David Shavit, professor, D.L.S., Columbia University
Earl R. Shamaker, associate professor, M.S., Louisiana State University
William E. Studwell, professor, M.S.L.S., Catholic University, M.A., University of Connecticut
Elizabeth A. Titus, assistant to the director, associate professor, M.U.P., Wayne State University, A.M.L.S., University of Michigan
Jennie E. VerSteeg, assistant professor, M.A., University of Iowa, M.A. & M.S., Iowa State University
Norman Vogt, associate professor, M.S.L.S., University of Wisconsin

Regional History Center and University Archives

Glen A. Gildemeister, director, Ph.D., Northern Illinois University
Cindy S. Ditzler, archivist, M.A., Western Illinois University

The Northern Illinois University Libraries system consists of Founders Memorial Library, branch libraries which include the Faraday Library, the Hoffman Estates Education Center Library, the Lorado Taft Instructional Materials Center, the Map Library, the Music Library, the Rockford Education Center Library, and the Regional History Center/University Archives. The University Libraries contain over 1.5 million volumes as well as periodicals, government publications, microforms, maps, recordings, and audiovisual materials.

NIU Libraries are participants in the Illinet Online (I/O) System, a network involving 46 academic institutions throughout Illinois. Using computer workstations in the libraries or via dial-up and the campus backbone, users may immediately determine which libraries own desired research materials. Materials not owned by NIU can be obtained quickly from other I/O member libraries.

Founders Memorial Library, the main library, has five levels with 290,000 square feet of space and seating capacity for 1600 students. The first floor houses key library services including the circulation desk, the general reference desk, computer reference services, library instruction, the information desk, information delivery services, the reserve reading room, the newspaper reading room, and an area containing specialized equipment and research collections for users with disabilities. Microforms, government publications, and social sciences and humanities reference are located on the second floor; science, engineering, and business reference on the third floor; and rare books and special collections on the fourth floor. The upper three floors house circulating books and nonprint materials.

The Faraday Library serves faculty and students in the disciplines of chemistry and physics. Similarly, the Music Library serves the music curriculum; the Map Library contains maps and atlases for research in geography; and the Instructional Materials Resources Center complements the Outdoor Education Program at Lorado Taft Field Campus. The Hoffman Estates Education Center Library and the Rockford Education Center Library service the needs of library users at those sites. Regular, interim, and holiday hours are posted near the entrance to each library.

NIU libraries provide a variety of guides to collections and services. These materials are available at the information desk and at service sites throughout Founders Memorial Library. Instruction in the use of the library is given to classes by librarians as part of the University Libraries library instruction program. Library instruction covers both basic library orientation and, for upper-level classes, in-depth instruction related to materials in particular subject areas.
College of Law

Dean: LeRoy Pernell, J.D.
Associate Dean: Mark W. Cordes, J.D.
Assistant Dean: Leonard B. Mandell, J.D.

The College of Law offers a three-year, full-time day program and limited enrollment, part-time study leading to the J.D. degree or J.D.-M.B.A. Student enrollment is approximately 300. The College of Law is fully accredited by the American Bar Association and is a member of the Association of American Law Schools.

The College of Law is housed in Swen Parson Hall, an impressive Gothic structure. The facilities as well as the student/faculty ratio promote a community atmosphere in which law faculty and students work and study in close proximity. In addition to academics, law students are involved with a wide variety of scholarly activities such as Law Review, several moot court 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 in the College of Law Bulletin, which may be obtained from the College of Law Office of Admissions and Financial Aid, Room 276, by phone at (815) 753-1420, or via the World Wide Web.
Administration

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LeRoy Pernell, J.D., dean, College of Law
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Notices

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, the student should remain in close touch with departmental advisers and 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.

Student Responsibility

See "General Regulations" section of this catalog.

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 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 1973, the Age Discrimination Acts of 1974 and 1975, the Vietnam-Era Veterans' Readjustment Assistance Act of 1974, 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 director, Lowden Hall 302, 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).

Language of Instruction at NIU

Northern Illinois University recognizes the richness that students of diverse cultures bring to the university community, and likewise hopes to instill in its students an appreciation of such diversity. The university also recognizes the importance of ensuring all of its students access to its educational benefits, and of fair and equitable treatment in the delivery of its academic programs, as well as its obligation to employers and other institutions that may assume competence in communication in English on the part of NIU graduates. English is the language of instruction at Northern Illinois University and the only common language of the university's faculty and students. Therefore, academic activities relating to graduate degree requirements or course credit, including presentations, examinations, and theses and dissertations, are to be in English. Appropriate exceptions include classes, examinations, theses, and other academic activities within the Department of Foreign Languages and Literatures, which may be wholly or partially in another language as applicable; other examinations designed specifically to evaluate students' proficiency in languages other than English; any courses for which competency in a foreign language has been established as a prerequisite; foreign-language citations and quotations; and multicultural activities designed to expose students to the experience of other languages and cultures, when relevant to the nature of particular courses.

Immigration Reform and Control Act

Regulations Affecting Employment by the University

The 1986 Immigration Reform and Control Act mandates that any person employed by Northern Illinois University after November 6, 1986, must be either a U.S. citizen or possess current employment authorization from the U.S. Immigration and Naturalization Service. All such employees, including graduate assistants, must be prepared to present original documentation to the employing department/cost center within three days of the start date of 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 located in Altgeld Hall 206. 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.
Conduct and Discipline Regulations

It is expected that all enrolled students intend to engage in serious educational pursuits. When students accept admission to Northern Illinois University, 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 "Disruption of Instruction." Copies of the most current Judicial Code may be obtained at the university’s Judicial Office.

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.

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.

Sanctions may result from 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.

Sanctions may result from the following conditions:

graduate education is a privilege accorded to those students deemed able to profit from the associated intellectual experiences. When a student's behavior within a classroom, laboratory, or other formal instructional setting is such that the rights of other students to an effective learning environment are being violated, that student may lose the privilege of attending the class or receiving credit for the course in that term.
In any case of the disruption of instruction by a graduate student or student-at-large, the instructor may require that student to leave the class for the balance of that class session. Whether or not the student is immediately removed from the class, the instructor may file a statement of the incident with the department chair, providing the student with a copy, and may ask that the chair suspend that student from further participation in the course. The chair of the department may, upon recommendation of the instructor and after investigating the incident, suspend that student from class attendance and recommend to the dean of the Graduate School that the student be permanently barred from the class for the remainder of that academic term. The student must be notified in writing of such action and may appeal the department's recommendation to the dean within one week of the notification. Upon such written appeal, the dean or dean's designee shall conduct a hearing, providing for a presentation of the facts relative to the disturbance. The decision of the dean's office shall be final. Repetition of disruptive behavior constitutes grounds for dismissal from the university.

Student Information and Records

Documents submitted in support of an application for admission to the Graduate School or for student-at-large status become the property of Northern Illinois University and will not be returned to the applicant or transmitted to another institution. Such documents will be retained by the Graduate School for a minimum period of one year; retention beyond that minimum cannot be assured.

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 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 materials maintained by Northern Illinois University are available for review in the Office of Registration and Records. All questions about interpretations or clarifications involving university policy and procedures regarding students' records are to be directed to the university legal counsel.

There are four basic types of student record: 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 enrollment and educational participation and performance. Maintained in connection with the academic progress of students-at-large. Some or all of these student data are provided by the Office of Registration and Records and the Graduate School 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; the Student Financial Aid Office for operation of the university's student financial assistance program; and the Graduate School for graduate fellowships and assistantships. The Bursar keeps a complete record of the student's financial transactions relative to payment of the university charges accrued.

For those students who require medical assistance and care from the University Health Service, at the time of their first contact with the service a medical history record is created and maintained by the Health Service staff. Only information pertinent to the health of the individual is included therein. Health Service medical records will be destroyed ten years after the last date medical services were provided.

The Office of Career Planning and Placement, 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 student health 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 the student the financial records of his or her parents or confidential letters and statements of recommendation which were placed in the student's 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 the 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 the health, safety, and welfare 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 student's written authorization. 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 the student shall be notified of such order or subpoena by personal service or certified mail to his or her last known address.

The student has the right to personally review his or her records in the presence of a university representative at an appropriate convenient campus location. This right pertains separately to each status to which the student has been in attendance at the university (i.e., undergraduate, student-at-large, law, graduate). 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 the Office of Career Planning and Placement, 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. (Academic grade review procedures are covered elsewhere.) 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 no 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 to another educational institution, an application for employment, or receipt of an honor or honorary recognition. However, the student is not 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 publishes 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 requester 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, gender, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student.

Students who believe that their privacy rights under the Family Educational Rights and Privacy Act of 1974 have been violated, have the right to file a complaint with the Family Policy Compliance Office, U.S. Department of Education, 600 Independence Avenue, S.W., Washington, D.C. 20202-4605.
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Note: West Campus Site Improvement Project – watch for construction signs and street closures.

Exit: Annie Glidden Road
(Second DeKalb exit if traveling from the east, first exit if approaching from the west.)

Directions to NIU. NIU's main campus in DeKalb, Illinois, is located 1.5 miles north of the East-West Tollway (I-88). The city is also accessible via state highways 38 and 23. First-time visitors exiting from the East-West Tollway are advised to use the Annie Glidden exit as this is the most clearly marked approach to the campus.

Visitor Parking. Visitor Parking is available in a pay lot southwest of the Holmes Student Center at the intersection of Carroll Avenue and Locust Street.