# Graduate Academic Catalog (2012-2013) 

University of Nebraska at Omaha

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2012-2013 Graduate Catalog

## GENERAL INFORMATION

## Welcome

## Welcome from the Dean

Welcome to the 2012-2013 catalog for the Office of Graduate Studies at the University of Nebraska at Omaha (UNO).

For more than 100 years, UNO has helped professionals advance their careers through a wide array of awardwinning graduate programs. We focus our attention, expertise and resources on our most important responsibility-our students.

There are more than 60 graduate programs, at all levels, to explore in this catalog. UNO has numerous opportunities for you.
UNO is located in the heart of Nebraska's largest city and is regarded as a forward-thinking, metropolitan university with premier graduate programs. UNO is recognized as a Carnegie Doctoral Research University for our specialized doctoral programs and comprehensive range of master's degrees and certificates. Our graduate faculty represents the very best in their fields, earning national teaching awards, and they are dedicated to individual student instruction and mentoring.
A graduate degree from UNO will give you an important edge in a competitive marketplace, command higher earnings throughout your career, and prepare you to be a leader in your community.
Our Graduate Studies office and the faculty in all of our programs are here to assist you as you explore graduate school, and we are here to support you when you choose UNO.

So, use this catalog as a resource to help you prepare to develop new professional skills through a graduate degree.

If you have any questions or need advice, please contact the Graduate Studies office.

Deborah Smith-Howell, Ph.D.
Associate Vice Chancellor for Academic Affairs \& Dean of Graduate Studies

## Mission Statement

The Mission of Graduate Studies at the University of Nebraska at Omaha is to develop, enhance, and promote outstanding graduate education; to ensure a rich environment for learning, creative activity, and the discovery and communication of new knowledge; and to be recognized for excellence in regional, national, and global engagement and contributions.

GOAL A: UNO Graduate Studies will develop, enhance, and promote outstanding graduate education.
OBJECTIVE 1: UNO Graduate Studies will continually enhance UNO's existing graduate education programs.

OBJECTIVE 2: UNO Graduate Studies will develop outstanding new graduate education programs.
OBJECTIVE 3: UNO Graduate Studies will promote graduate education opportunities at UNO.

GOAL B: UNO Graduate Studies will ensure a rich environment for learning, creative activity, and the discovery and communication of new knowledge.

OBJECTIVE 1: UNO Graduate Studies will foster a culture and environment that positively acknowledges and rewards creative endeavors.
OBJECTIVE 2: UNO Graduate Studies will promote and nurture the dissemination of scholarship.

GOAL C: UNO Graduate Studies will be recognized for excellence in regional, national, and global engagement and contributions.

OBJECTIVE 1: UNO Graduate Studies will be recognized for excellence in engagement.

OBJECTIVE 2: UNO Graduate Studies will support students' success in their internships, training, and other community centered opportunities for learning.

## Graduate Studies Organization

In 1971, at the direction of the Board of Regents, the Graduate College of the University of Nebraska (UNL and UNMC) and the Graduate College of the University of Nebraska at Omaha were merged to form one Universitywide Graduate College with one Graduate Faculty. The ultimate academic authority for all graduate programs within the University is vested in the approximately 1700 members of the Graduate Faculty.

The Bylaws of the Board of Regents state that the Executive Vice President and Provost of the University of Nebraska shall serve as Dean of the University-wide Graduate College and as presiding officer of the Graduate Faculty and councils thereof. The legislative and academic authority of the Graduate Faculty is vested in the Executive Graduate Council, comprised of eight members elected by the graduate faculty. Specific responsibilities of the Dean and of the Executive Graduate Council can be found in the University of Nebraska Graduate College Governance document.

On each campus of the University in which graduate programs are housed, there is a campus Dean of Graduate

Studies, a campus Graduate Faculty and a campus Graduate Council. The UNO Dean of Graduate Studies administers graduate programs and policies on that campus; serves as presiding officer of the UNO Graduate Faculty and the UNO Graduate Council; and forwards to the Dean of the Graduate College matters which are of University-wide concern. The UNO Graduate Faculty consists of those members of the University-wide Graduate Faculty administratively assigned to UNO. The UNO Graduate Council acts as an advisory body to the UNO Dean of Graduate Studies, coordinates the graduate studies on the UNO campus and recommends to the Executive Graduate Council actions affecting students and programs on more than one campus. This Council consists of 22 elected or appointed faculty members and two graduate student members. Specific responsibilities of the Dean of Graduate Studies and of the UNO Graduate Council may be found in the document "Organization of Graduate Studies: University of Nebraska at Omaha".

## Historical Profile

For over 100 years since its founding in 1908, UNO has provided Omaha, the state of Nebraska and the nation with men and women of sound intellectual training and preparation for life. Its goal for its students, "To earn a living and live a cultured life not as two processes, but as one" has been its guide over the years.

The University of Omaha was founded in 1908 as a private, nonsectarian college. The University awarded its first master's degrees in 1919 by special vote of the Board of Trustees. IN 1983 the University of Omaha became the Municipal University of Omaha; in that same year the Master of Arts and the Master of Science degrees were authorized. In 1960 the Board of Regents of the University authorized the Specialist in Education degree, and in 1965 they authorized the Master of Business Administration degree.
In 1968 the Municipal University of Omaha was merged with the University of Nebraska System and became the University of Nebraska at Omaha. In 1971 the Graduate College of the University of Nebraska was formed to govern graduate studies throughout the University of Nebraska. Since 1968, the University of Nebraska at Omaha has been authorized to offer additional professional master's degrees. In 1974 the cooperative program with UNL leading to the Ph.D. in three areas of psychology was approved. IN 1992 the Board of Regents and the Coordinating Commission for Higher Education approved a joint EdD in Educational Administration degree program (UNL and UNO). The PhD in Information Technology was approved in 2004. In 1993, the PhD in Criminal Justice was approved, and in 1994 the PhD in Public Administration was approved. In 2005, the Language Teaching program was approved. In 2011, the Master of Arts in Athletic Training program was approved. In 2012,
the PhD in Exercise Science, and the Master of Science in Information Assurance were approved. UNO currently offers 43 master's degrees, six doctorate programs (including two joint/cooperative programs), one Specialist degree and 18 graduate certificates.

Graduate studies provide more advanced education than the undergraduate work upon which all graduate programs are based. At UNO graduate students:

- Work toward the various graduate certificates and/or degrees offered by the University;
- Earn graduate credit for the issuance or renewal of certificates for teachers, administrators and educational psychologists; and
- Obtain personal or professional enhancement.

To enable the student to attain these objectives, the Graduate Faculty at the University of Nebraska at Omaha provide graduate courses, workshops, institutes, seminars, practica, research and special problems courses, and the supervision of theses or special projects. Thus, they promote the spirit of free investigation in the various disciplines and, at the same time, serve to unite the various branches of the University in advancing human knowledge and providing intelligent, capable leadership for society.

## Accreditation

The accreditations listed below indicate the concern of the faculty and the administration of UNO to meet rigorous standards of academic quality. These standards include such factors as professional attainments of faculty, quality of research, library holdings, physical facilities and general support for the respective programs by the funding authorities. Students, therefore, can be assured their educational experiences at UNO will meet high standards of quality.

UNO is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools (NCA). The HLC is an independent corporation which was founded in 1895 as one of six regional institutional accreditors in the United States. The HLC accredits degree-granting post-secondary educational institutions in the North Central region. The commission can be contacted at:

The Higher Learning Commission
230 South LaSalle Street, Suite 7-500
Chicago, IL 60604-1413
Telephone: 1-800-621-7440
info@hlcommission.org
UNO also has the following accredited degree programs, which can be found on-line at http://www.unomaha.edu/oie/tabs/accreditation/acprog.php

The School and Community Counseling (prior to fall 2012) Clinical Mental Health Counseling (spring 2013) programs are accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP), the national accrediting agency for Counselor Education programs.

Course credits from UNO are accepted by other member colleges and universities of the North Central Association and by member institutions or other regional accrediting agencies.

## Academic Calendar

The University of Nebraska at Omaha Academic Calendar for 2012-2013 can be found at http://registrar.unomaha.edu/calendar/.

## Admission to the Graduate College

## Application Process

An online Application for Graduate Admission must be filed with the UNO Office of Graduate Studies for students who:

- Desire a graduate degree or graduate certificate
- Desire graduate credit for renewal of a teaching certificate or professional development
- Desire to transfer graduate credit to another university

Special Note: All students, except current junior- and senior-level students, must complete a graduate application (or intercampus registration form for those students admitted to graduate programs at the other University of Nebraska campuses) to receive graduate credit for any graduate level courses taken at UNO. Special permission is required for junior- or senior-level students to register for graduate courses.

## How to Apply

- The Application for Graduate Admission must be completed online at
https://admit.nebraska.edu/applyUNO/login.action. The online application will specify all of the required documentation for the specific program. Please review and complete the online application carefully. For more information about specific program admission requirements and processes, please see the specific program information at
http://www.unomaha.edu/graduate/programs.php or contact the appropriate graduate program chair.
- A non-refundable application fee of $\$ 45.00$ (U.S. dollars) is required for all new applicants to UNO Graduate Studies, including undergraduates within the University of Nebraska system, and students who have been previously admitted as graduate students at the

University of Nebraska-Lincoln, the University of Nebraska at Kearney or the University of Nebraska Medical Center.

- Official transcripts from EACH college or university (except UNO) attended must be sent to the UNO Office of Graduate Studies. Hand-carried, faxed or studentsubmitted credentials are not acceptable.
- To be considered for admission in any given semester, all transcripts and supporting documentation must be submitted on or before the department deadlines. Please see the specific program pages for each program's deadlines. It is generally to the applicant's advantage to apply well before the published deadline, particularly if the applicant wishes to be considered for fellowships, assistantships or other forms of financial aid.
- Applicants are solely responsible for making certain all their materials have been received. They can do so by logging onto mavlink at
https://mavlink.nebraska.edu/psp/mavlink/NBO/ENTP/ h/NBO/ENTP/h/?tab=NBO_NVT_GUESTS and checking their "To Do List".
- Notification of acceptance by a department/school Graduate Program Committee or faculty member is advisory only. Admission is granted solely by the Dean of Graduate Studies.

Special Note: The application fee will be waived once for:

- Students admitted as non-degree graduate students to UNO who later wish to apply to a UNO degree program or as an unclassified student.
- Students who applied to a degree program, were denied admission to that program, and, within a two-year period, re-apply to the same program.
International Students must complete an International Graduate Application and submit all supporting documents to the Office of International Studies and Programs.
Students Applying to Graduate Certificate
Programs will follow the same procedure as above with the following exceptions related to the application and fee requirement:
- Students pursuing a certificate program who later apply to a graduate degree program must complete a new application and submit all other required credentials. If the degree is within the same department(s)/school(s) as the certificate program, no application fee will be charged. If the student applies for a graduate degree program after the certificate is completed, he/she must submit a new application, application fee, and all other required credentials.
- A student pursuing a graduate degree program can be awarded a certificate while completing the degree; however, the student must complete a new application
to be admitted to the certificate program. $\mathrm{He} /$ she will not be charged an application fee if the certificate is within the same department(s)/school(s) as the graduate program in which he/she is already enrolled. However, if a student applies for a certificate program after the graduate degree is completed, he/she will need to submit a new application, application fee and all other required documents.
- Students are only eligible for financial aid if they are in a degree-seeking program as well.

Students applying for a Second Master's Degree, Graduate Certificate or pursuing an Endorsement in an area other than the first completed program must complete a new graduate application and submit an application fee and other required documents.
Students applying for a Master's Degree with a Double Major can pursue their professional/scholastic goals by acquiring more knowledge in a second field than provided by the option of earning a minor, yet not be required to complete a dual degree program (i.e., two master degrees in separate majors, typically $60+$ hours). Students are allowed to pursue a double major within the same degree (e.g., a master of arts in two different majors). For instance, a student may be permitted, with proper approvals, to pursue a master of arts degree in the majors of history and geography because these majors lead only to the master of arts degree. One cannot attain a double major in history and biology because these majors lead to the master of arts and master of science degrees, respectively. To apply:

- Students must submit two separate applications and only one application fee. An email must then be sent to graduate@unomaha.edu, clearly specifying they are seeking a double major, which department/school is to consider the application first, and if support from both of the departments/schools is being sought.
- The graduate committee of the first department/school will pass the application to the second graduate committee with the result of its decision (recommendation for acceptance with support, recommendation for acceptance without support, refusal of admission). The decision to recommend admission by one of the graduate committees does not affect the decision of the other. The criteria for admission for acceptance may differ between programs; admission to one or both of the department's/school's programs does not guarantee acceptance for a double major master degree. Final approval of all applicants rests with the Dean for Graduate Studies.
- If one major is approved and one denied, the student must submit another application with an additional application fee to apply to another major.

Students who wish to change programs, except non-degree students, must complete a new graduate application and submit with it a non-refundable graduate application fee. The decision as to whether students will be accepted shall be left to the graduate committee of the department/school in which they are seeking admission and to the Dean of Graduate Studies. Admission to a new program is not automatically granted. If a currently enrolled graduate student is admitted to a graduate program prior to receipt of their final grades for the current semester, the program may re-evaluate its admission decision if the student receives a grade of "C-" or below in any course work (undergraduate or graduate) for that semester.

## Criteria for Admission

Those applicants who have earned, or will have earned, a bachelor's or master's degree at a regionally accredited college or university in the United States, or the equivalent of such degrees in another country, will be considered for admission. Prospective students may apply for admission during or after the final year of undergraduate study, but must submit the official baccalaureate degree transcript to the Office of Graduate Studies before the end of the first year of enrollment.
Special Note: Non-immigrant applicants must contact the Office of International Studies concerning the filing of required financial documents and obtaining the appropriate application. International students with a 3-year degree are referred to the program in which they wish to pursue graduate studies for evaluation of their transcripts to determine possible additional course work. They can be considered for graduate admission.

The decision to admit an applicant to a program is based primarily on a combination of the following criteria according to the requirements of the specific program.

- Quality of previous undergraduate and graduate work. The Graduate College requires as a minimum standard a "B" average of 3.0 on a 4.0 scale, in a program of study resulting in the award of a baccalaureate degree from a regionally accredited college or university. If an applicant has studied at the graduate level and performed satisfactorily, less weight may, but not necessarily, be placed on the quality of the undergraduate academic record. Some programs require a higher minimum grade point average for admission.
- Strength of letters of recommendation from persons competent to judge the applicant's probable success in graduate school. These letters are usually from the applicant's former professors who are able to give an in-depth evaluation of the applicant's strengths and weaknesses with respect to academic work. Additional recommendations may come from
employers or supervisors who are familiar with the applicant's work experience.
- Official scores on required aptitude or advanced knowledge examination(s).
- Statement by the applicant of academic career objectives and their relation to the intended program of study. These statements help the department/school identify students whose goals are consistent with its objectives.
- Other evidence of graduate potential. Some programs require other evidence of graduate potential, such as a portfolio of creative work, completion of specialized examinations or personal interviews.

Special Note: If a currently enrolled graduate student is admitted to a graduate program prior to receipt of their final grades for the current semester, the program may reevaluate its admission decision if the student receives a grade of "C-" or lower in any course work (undergraduate or graduate) for that semester.

## Admission to the Graduate College

Responsibility for admitting applicants to graduate programs rests with the Dean of Graduate Studies. Academic departments/schools review admission applications and credentials and make admission recommendations to the Dean. The standards maintained by the Graduate College and individual departments/schools are applied to ensure that applicants admitted to the University are well qualified for graduate study and have a reasonable expectation of successfully completing a graduate program. Standards for admission to doctoral degree programs are generally higher than those for admission to master's degree programs. In many degree programs, the number of applications received from qualified applicants for graduate study exceeds the number of applicants who can be accommodated. In such cases, only the most highly qualified are offered admission. The number of spaces available in various departments/schools is limited according to the availability of faculty and resources.

## English Proficiency Examination Requirement

Students whose language of nurture is not English must have a command of oral and written English adequate for graduate work. All applicants to Graduate Studies at UNO whose language of nurture is not English must present a score on the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS), or the Pearson Test of English (PTE).

Automatic waivers from this policy are granted for persons who have already received a baccalaureate or equivalent degree from an English-speaking institution of higher education in the United States, the United Kingdom,

Canada, English-speaking Africa, Australia, Ireland or New Zealand.

While individual programs may require a higher score, the UNO Graduate Council has set a minimum score for admission to graduate studies of 500 on the written TOEFL, 173 on the computer-based TOEFL, 61 on the internet-based TOEFL, 5.5 on the IELTS, or 44 on the PTE, with no exceptions to this policy. These requirements are in addition to any requirements established by the individual Graduate Program Committees.

## Categories of Admission

## Unconditional Admission

Unconditional Admission status may be granted to students considered fully qualified to undertake the program to which they were admitted. A student must have a baccalaureate degree from a regionally accredited institution. Other qualifications might include, but are not limited to, academic foundation requirements, an interview, area of subject tests, advanced tests, a portfolio or performance, grade point average and/or letters of recommendation.

## Provisional Admission

Provisional Admission status may be granted to students who have not met all of the conditions for unconditional admission. Departments/schools and/or the Dean of Graduate Studies may impose certain requirements which must be fulfilled by the student in order to maintain this status.

- Provisional admission may be granted to an applicant who has less than a "B" average ( 3.0 on a 4.0 scale) in the undergraduate work in the proposed graduate major and minor (but in no case less than a 2.7 GPA). This admission may be granted for reasons of maturity, experience or other circumstances under which the student may be deemed capable of high quality graduate study.
- Provisional admission will not be removed until the student has earned at least the grade of "B" ( 3.0 on a 4.0 scale) in each course involved in the first 12 hours of graduate study.
- Provisional admission may occasionally be granted to an applicant who has graduated from an unaccredited institution. Unconditional status may be attained upon completion of 12 hours of graduate courses with a "B" ( 3.0 on a 4.0 scale) average, providing all other requirements are met.
- Provisional admission may occasionally be granted to seniors at UNO needing not more than nine hours of undergraduate credit to complete their baccalaureate degree and wishing to register for graduate credit,
subject to their receiving a baccalaureate degree within the twelve-month period immediately following such registration. They must, however, apply for admission to graduate studies and, if admitted, they should register as graduate students. Graduate course work taken prior to receipt of the baccalaureate degree may not always be accepted for transfer to other institutions as graduate work or for completion of degree requirements at UNO.
- Provisional admission may occasionally be granted to an applicant who has not submitted the required aptitude or advanced knowledge test score(s). The student must, however, submit the score prior to the second registration as a graduate student.

Provisional status will continue until provisions of admission are fulfilled or changed by the recommendation of the Graduate Program Committee and approved by the Dean of Graduate Studies.

## Verified Non-degree admission status

Non-degree admission status may be available for an individual with an undergraduate or graduate degree from a regionally accredited institution who is not seeking a graduate degree from UNO. Applicants applying for the verified non-degree admission status need only submit an application for admission, the required application fee and official degree transcripts.

## Limited Express Non-degree admission status

Limited express non-degree admission status allows students to register for classes without waiting for Graduate Studies to receive official transcripts. Applicants applying for the limited express non-degree admission status need only submit an application for admission, and the required application fee. Admission may be extended beyond the twelve (12) graduate hours with the receipt of official degree transcripts. Applicants requesting a Limited Express Non-degree admission must be eligible for non-degree admission status and have earned a bachelors or higher degree with a cumulative grade point average of at least 2.7 on a 4.0 scale.
As a rule, no more than 12 graduate hours may be earned as a non-degree student. It is not implied or intended that a graduate degree may be earned by a student in this status. A non-degree student desiring an exception to exceed the 12 hour limit must submit a written request and explanation to the graduate dean.
Special Notes: UNO does not allow intercampus registration for Non-Degree students. Students in this category are not eligible for financial aid. Advisors are not assigned to non-degree students
Non-degree students are advised to consult with the appropriate department/school concerning class availability and prerequisites before attempting to register. Because of
limited class size and resources, certain academic units may limit the enrollment of non-degree students. To determine whether a non-degree student is allowed to enroll in a graduate course, please check the course descriptions listed on the web.

Admission to a degree program or to unclassified admission from non-degree status is not guaranteed. Graduate-level hours taken as a non-degree graduate student prior to admission to a degree program may be included in the program of study at the discretion of the major department/school and the graduate dean. Students changing from non-degree status also may be required to take certain prerequisite courses by the major department/school and the Dean for Graduate Studies.

International students on F1 visas, except graduate visiting students, are not eligible to enroll under nondegree status. Non-degree students must maintain the same academic standards as degree seeking students or unclassified students.

Students dismissed from a graduate program who then re-apply as non-degree students may only do so if they request and receive permission in accordance with departmental/school graduate program policy to enroll as a non-degree student.

## Unclassified Admission

Unclassified admission is available in some departments/schools for students who:

- Are taking courses for professional growth or personal interest, but do not intend to pursue an advanced degree.
- Are enrolled in a graduate degree program at another institution and wish to transfer credits earned at UNO.
- Are working toward certification, additional endorsement, or renewal of certification in professional education.
Students applying for the unclassified category are not automatically entitled to this status upon application for it. The department/school reviews these applications and the student may be turned down for this category, as with other categories of admission. International students on F1 visas, except graduate visiting students, are not eligible to enroll as unclassified students. Students admitted as unclassified are not eligible for financial aid.
Special Note: Successful completion of graduate courses as an unclassified student does not obligate a graduate department/school to accept those courses for credit toward the fulfillment of degree requirements. Students who enroll under the unclassified designation and subsequently decide they wish to pursue a graduate degree must consult with their advisor and the chair of the graduate program committee. If admission to the degree program is
recommended, the department/school will advise the Office of Graduate Studies of the decision and the credits to be accepted toward the degree through a change in plan of study form.


## Immunization Requirements

To prevent the possibility of a measles epidemic throughout the UNO campus, all new students born on or after January 1, 1957 are required to:

1. Provide family documents or private physician records as proof of two (2) doses of the vaccine (MMR)
2. Submit the University of Nebraska at Omaha PreEnrollment Health Requirement Document
For forms and information, visit the Immunization
Requirements website at
http://studenthealth.unomaha.edu/preenrollment.php.

## FINANCING A GRADUATE EDUCATION

Tuition Rates and Residency<br>Tuition Rates for the 2012-2013 Academic Year<br>Graduate Studies Tuition Rates 2012-2013<br>(per credit hour)<br>Resident: \$245.25 Non-resident: \$645.75

## Distance Education Tuition Rates 2012-2013 <br> (per credit hour)

For a comprehensive list of distance education tuition rates, visit http://cashiering.unomaha.edu/tuition.php

## Fees for the 2012-2013 Academic Year

For a comprehensive list of fees, visit http://cashiering.unomaha.edu/tuition.php

## Residence Classification for Tuition Purposes

For information on residency, visit http://www.unomaha.edu/graduate/prospective/resappl.php

## Scholarship and Financial Aid Information

## Scholarships and Financial Assistance

Graduate Studies Awards, Scholarships and Waivers

Helen Hanson Outstanding Student Award
Graduate Thesis Scholarship
Dissertation Scholarship
Summer Graduate Scholarship
Phi Delta Gamma
Presidential Graduate Fellowship-masters \& doctoral
Competitive Graduate Fellowship
Regents Tuition Waiver
Elton S. Carter
UNO Advantage Scholarship Program
Metropolitan Advantage Program (MAP)
Please visit the Office of Graduate Studies website, http://www.unomaha.edu/graduate/current.php?p=scholars
hips, for detailed information on submission deadlines, term of award, and awarded amount.
UNO's Office of Graduate Studies also funds the Rhoden Biological Fellowship, in which the Biology and Psychology departments alternate in awarding the Fellowship. The annual fellowship is $\$ 12,000.00$ and the summer fellowship is $\$ 4,000.00$; both also include tuition remission, allocated through the graduate assistant budget.

## Federal Financial Assistance

The Free Application for Federal Student Aid (FASFA) is the form the U.S. Department of Education requires to determine your financial aid eligibility. Students with financial need may be eligible for Federal Work-Study funding. Most applicants will be eligible for direct unsubsidized Stafford loans. Your application is examined by a federal processor and the results are sent electronically to the Office of Financial Aid at UNO.

## Office of Financial Aid

## Who should apply for residence?

All applicants for admission to the University of Nebraska should be aware that recent arrivals to the state may be classified as residents for most intents and purposes and still be non-residents for tuition purposes under University of Nebraska Board of Regents residency policy (revised 1994). Therefore, when first applying for admission, all students who did not graduate from a Nebraska high school or who have not lived in Nebraska for a period of time long enough to determine resident status may be considered non-residents until evidence is shown of having completed all requirements for resident tuition.
A change in resident status for tuition purposes is not granted automatically. Students who have been classified as non-residents must submit Applications for Residence Classification and all applicable support documentation before resident status can be determined. A student applying for residence for any semester or term beginning with the Fall Semester 1995-1996 will be required to have established a home in Nebraska at least 12 months immediately preceding the term or semester for which residence status is sought. Any individual who has moved to Nebraska primarily to enroll in a post-secondary institution in Nebraska will be considered a non-resident for tuition purposes for the duration of his/her attendance. Enrolling more than half-time ( 7 semester hours or more during one semester) for any term at a university, college or community college in Nebraska during the 12 months immediately
preceding the term or semester for which residence status is sought will be considered strong evidence that an individual moved to Nebraska primarily to enroll in a postsecondary institution in Nebraska. The student would therefore be considered a non-resident for tuition purposes for the duration of his or her attendance at the University of Nebraska.
A student applying for residency status must be a U.S. citizen or have been granted permanent resident, asylee or refugee status by the Immigration and Naturalization Service, unless filing for residency based on spouse or dependent status. If the student is trying to qualify for residency by spouse or dependent status, the spouse or parent/guardian must be a U.S. citizen or have been granted permanent resident, asylee or refugee status by the Immigration and Naturalization Service.

The University reserves the right to question and/or request a residency application and supporting documentation from any individual who wishes to be considered for resident tuition status.

## How and when does one apply for residence?

Students who have been classified as non-residents but believe they qualify for resident status should review the various categories outlined in this document. After determining the appropriate category, each applicant should: (1) complete and submit an Application for Residence Classification, (2) provide photocopies of appropriate support documentation, and (3) apply within the published time period. (Note: Merely changing residence information on any other University form will not change your resident status.)
Applications for residence for a specific semester or summer session can be submitted to the Office of Admissions prior to the first day of classes for that period of enrollment. The last day to qualify for residency for a specific term is the last day of the registration "add period." The last day to apply for residency (including the submitting of all supporting documentation) is the end of the third week of classes of the semester for which the tuition was charged. For summer sessions, the application deadline is the end of the first week of classes.
All students must register and enroll in classes for the term in which residency is sought, failure to register for the term for which residency is sought will result in the cancellation of the residency application.
Applications determined to be incomplete after the last day to apply will be voided. To apply for a subsequent semester or term, one must submit a new application and provide appropriate updated support documentation.

## Which regulations determine residence?

Students' rights to become residents for tuition purposes at the University of Nebraska are determined according to provisions of the Nebraska Revised Statutes (re issued 1987). In accordance with these statutes, the University has been authorized to develop regulations and to make decisions regarding Nebraska residence for tuition purposes. These regulations provide the basis upon which the Director of Admission or the Director's designee determines whether students qualify as Nebraska residents for tuition purposes.
Individuals seeking to establish resident status for tuition purposes who are subject to the one (1) minimum requirement must be able to demonstrate that they have established homes in Nebraska at least one (1) year prior to the time they apply for resident status. Acceptable documentation for verifying the one (1) year residence period includes: (1) proof of home ownership, (2) apartment lease, and (3) canceled rent receipts/checks. Any other types of documentation must be approved by one of the University's residence officers. In addition to the one (1) year requirement, applicants will also be expected to obtain various other support documents (e.g.: a Nebraska driver's license, and checking or savings account with a Nebraska financial institution) and have held these documents for a reasonable period of time (usually at least one month). All twelve months of the residence period must be documented.
Individuals seeking residence for tuition purposes will be required to have their applications signed before a notary public attesting to the information of their statements. If it is subsequently determined that information on an application has been falsified, the applicant may be subject to disciplinary action by the University before the individual will be permitted to continue to enroll at the University. Such disciplinary action will be determined on an individual basis, and may include measures such as disciplinary probation or suspension, expulsion from the University, or reimbursement to the University for the difference between the tuition paid and the non-resident tuition rate.
According to policy, once an individual has been enrolled at the University or one of Nebraska's state colleges as a resident student, he or she will be afforded that privilege during the balance of that enrollment, provided the individual has a current domicile in Nebraska. Any subsequent enrollment as a resident would have to take place within two years of the last date of enrollment (provided the individual has a current domicile in Nebraska at time of application).

## Definition of terms

For the purpose of these regulations, the following definitions shall apply:

Resident Fees: The resident tuition rate as set by the Board of Regents and applicable to the academic program in which an individual intends to enroll.

Non-resident Fees: The non-resident tuition rate as set by the Board of Regents and applicable to the academic program in which an individual intends to enroll.

Legal Age: The age of majority (19 and older) set by Nebraska statute.

Emancipated Minor: An individual who, by virtue of marriage or financial status, has become independent of his or her parent(s) or guardian as defined by Nebraska statutes (for clarification contact the Office of Admissions).

Established Home: The place of abode in Nebraska that an individual continuously maintains a primary place of residence and where he/she is habitually present.

Legal Residence: The place of domicile or permanent abode as distinguished from temporary residence.

Dependent: A person who is claimed as a dependent or an exemption for federal income tax purposes by a parent, guardian or spouse.

## Questions

The Application for Residence for Tuition Purposes can be found on-line at
http://www.unomaha.edu/graduate/prospective/resappl.php
Please read all instructions and complete all information carefully. If you have questions about this application or for more information about the residence regulations, contact the appropriate office on your home campus. Your application for residence classification and all supporting documents should be sent to:

Office of Graduate Studies
6001 Dodge Street, Eppley Administration Building (EAB) 203
Omaha, NE 68182-0209
Phone:(402) 554-2341 or (800) 858-8648

## Graduate Assistantships

## Graduate Assistant Policy

## Academic Standards:

The graduate assistantship is intended as an award to students who have demonstrated high academic performance and potential either at the graduate or undergraduate level.

- Graduate assistants must be students in good standing in a degree or certificate program in the Graduate College.
- Dismissal from a graduate program for any reason shall result in simultaneous dismissal from any graduate assistantship position.
- The student will not be eligible for an assistantship thereafter until fully reinstated in a graduate degree or certificate program.


## Recruitment, Selection and Renewal of Graduate Assistants:

- Each graduate department/school or other departmental unit, as appropriate, shall establish its own procedure for graduate assistantship recruitment and selection in accordance with University policy on affirmative action/equal opportunity.
- Assistantships are not automatically renewable and are dependent upon assessment of work and classroom performance. The student is reminded that, whether or not outside work commitments are involved, graduate assistantships may not be renewed if either graduate class work or assistantship duties are not carried out in a satisfactory manner.


## Workload:

- The workload for a graduate assistant should average 20 hours per week for the duration of the appointment and shall be construed to be the equivalent of .33 FTE.
- The department/school or unit in which the graduate assistant is employed should make arrangements with its assistants regarding vacation periods.
- The Graduate Faculty considers a student who is pursuing graduate study and holding a graduate assistantship to be carrying the equivalent of a full-time workload (see course load below) and, therefore, discourages the practice of holding additional jobs which may interfere with satisfactory performance of assigned duties.


## Course Load:

- Graduate Assistants are expected to carry a minimum of six graduate hours in each of the fall and spring semesters; graduate assistants working in the summer semester are not required to be concurrently enrolled.
- Graduate assistants may not register for more than 12 semester hours without the approval of both their supervisor and the Graduate Dean. The graduate assistantship will not pay for more than 12 semester hours in a semester.
- The six-hour minimum may be waived if the student is in the last semester of graduate work and needs less than six hours of graduate credit in order to complete requirements for graduation. For doctoral candidates, the six-hour minimum enrollment also may be waived with the approval of their supervisor and Graduate

Dean, if all required course hours except dissertation have been completed. In either case, students still must register for one course.

## Duties:

Duties assigned to graduate assistants should be directly related to and in support of graduate studies in their chosen field of study. Typical examples would be one or more of the following:

1. Teaching courses or discussion sections at the undergraduate level.
2. Instructing and supervising undergraduate level laboratories or tutorial sections.
3. Grading or otherwise evaluating performance of undergraduate students.
4. Collecting and/or processing research data for faculty members.
5. Preparing materials for laboratories or classroom presentations.

In general, other duties which involve a direct knowledge and application of knowledge related to the student's field of study would be acceptable. Graduate assistants should not be utilized solely for clerical duties.

It shall be the responsibility of each Graduate Program Committee, in consultation with the cognizant department chairperson or program director, to draw up an agreement with each graduate assistant at the time of the appointment which shall specify the stipend, duration and method of payment, the assistant's duties, and the general conditions of employment. The agreement shall be reviewed by the graduate assistant before it is signed by him/her and the chairperson of the Graduate Program Committee. The Graduate Program Committee, upon the recommendation of the graduate assistant's faculty supervisor and/or the department chairperson/school director or unit director, shall have the responsibility to review the assistant's performance and to terminate the appointment for failure to discharge satisfactorily the duties specified in the agreement.

## Lengths of Appointments:

Assistantships may be awarded on an academic-calendaror semester-by-semester basis.

## FAQ: Graduate Assistantships

## Q. WHAT IS A GRADUATE ASSISTANTSHIP?

A graduate assistantship is similar to part-time employment. The graduate assistant is hired, paid a salary (stipend), given a work schedule of no more than 20 hours,
assigned responsibilities and receives graduate tuition remission.

Graduate assistants are assigned responsibilities which provide supervised educational experiences at the graduate level. Frequently, this means assistants either teach or participate in research projects.

## Q. HOW DOES ONE APPLY FOR AN ASSISTANTSHIP?

Contact the department/school/office you are interested in for any available positions and their application procedures.

Check the Student Employment Services website for a listing of all university job openings. If any problems occur with the website, please contact Student Employment in Eppley Administration Building, Room 205.

Note that you must be admitted to a graduate degree or certificate program to be a graduate assistant; non-degree and unclassified students are ineligible.

## Q. FOR WHAT DO GRADUATE ASSISTANTS RECEIVE MONETARY COMPENSATION \& WHEN DO THEY GET PAID?

Graduate Assistants are hired to work 20 hours per week (. 33 FTE). On the last working day of the month, your paycheck will be electronically deposited directly into your bank.

## Q. HOW MANY GRADUATE HOURS DOES ONE NEED TO TAKE EACH SEMESTER?

Graduate assistants are required to carry a minimum of six graduate hours in each of the fall and spring semesters (please note that undergraduate deficiencies do not count toward this minimum requirement).

Be aware that nine graduate hours is a full-time course load for graduate students and, in order to defer some student loans, it may be a requirement to register for nine graduate hours. Please check with the Office of Financial Aid regarding the details of any particular loan.

The minimum of six graduate credit hours may be waived if a student is in his or her last semester and needs less than six graduate credit hours to complete the requirements for graduation; however, he or she must still enroll in one graduate course and complete the "Student Social Security Tax Exemption Statement--Last Semester", which is available by contacting Nicole Kersten via email at nkersten@mail.unomaha.edu Once this form is completed, the student may not be a graduate assistant again until he or she has completed the degree and are admitted to a different graduate program.
The minimum of six graduate credit hours also may be waived for doctoral candidates, with the approval of their
adviser and the Graduate Dean, if all required course hours except dissertation have been completed and the student will not be employed for more than 20 hours per week; however, he or she must still enroll in one graduate course and complete the "Student Social Security Tax Exemption Statement-Certification of Full-Time Graduate Status," which is available in the Office of Graduate Studies, Eppley Administration Bldg, Room 203.

## Q. WHAT IS THE MAXIMUM NUMBER OF GRADUATE HOURS ONE CAN TAKE EACH SEMESTER?

Graduate assistantships will pay for a maximum of twelve (12) graduate hours a semester.

## Q. CAN ONE REGISTER FOR AN UNDERGRADUATE COURSE AND HAVE THE TUITION PAID?

Yes, if the undergraduate course is required to fulfill a deficiency which is listed on your original admission letter/degree audit (automated plan of study).

If the undergraduate course is not listed as a deficiency in the student's original admission letter/degree audit (automated plan of study), the assistantship will not pay for the tuition.

## Q. HOW MANY HOURS DOES A GRADUATE ASSISTANT HAVE TO TAKE IN THE SUMMER?

None. (Graduate Assistants are allowed to take a maximum of twelve graduate hours.)
*Please Note: If a student works as a graduate assistant during the summer and is not registered at least $1 / 2$-time ( 5 hours), he or she will be required to pay Social Security taxes.

## Q. WILL AN ASSISTANTSHIP PAY THE TUITION FOR GRADUATE COURSES IN THE SUMMER?

Yes, if the student was a graduate assistant for the preceding fall and spring semesters or is working as a graduate assistant during the summer.

If the student was a graduate assistant for the spring semester only and will be one in the upcoming fall, he or she will be eligible for reimbursement for his or her summer graduate courses. He or she will not be reimbursed, however, until the last drop date for fall classes has passed. Please consult with the Office of Graduate Studies.

## Q. HOW DOES ONE PAY FOR CLASSES?

Once the necessary paperwork has been submitted to the Office of Graduate Studies by the department/school/office in which the assistantship is housed, Cashiering/Student Accounts will be notified of the assistantship. The
student's account will then be credited for the classes which are covered by the assistantship. The student must still pay any fees and other charges not covered by the assistantship.

## Q. WILL AN ASSISTANTSHIP PAY FOR GRADUATE COURSES TAKEN AT THE OTHER THREE UNIVERSITY OF NEBRASKA CAMPUSES (UNL, UNK, \& UNMC)?

Yes. However, the student must stop by the Office of Graduate Studies to obtain a tuition voucher before going to another campus to register.

## Q. WHAT HAPPENS IF ONE DROPS A CLASS DURING THE SEMESTER OR RESIGNS THE ASSISTANTSHIP?

The Office of Graduate Studies will send the student a prorated bill from the date the class was dropped or the assistantship was resigned. The student will be placed on stop enrollment until the bill is paid.

## Q. WHAT HAPPENS IF ONE DOESN'T START THE ASSISTANTSHIP AT THE BEGINNING OF THE SEMESTER?

Assistantships may be awarded on an academic-calendaror semester-by-semester basis. Normally these appointments start at the beginning of a semester.

## Q. MAY ONE HOLD ANOTHER JOB IN ADDITION TO MY ASSISTANTSHIP?

The Graduate Faculty considers a student who is pursuing graduate study and holding a graduate assistantship to be carrying the equivalent of a full-time work load and therefore discourages the practice of holding any additional jobs, which may interfere with satisfactory performance of assigned duties. With approval of your graduate program committee and the Dean of Graduate Studies, an additional assignment may be accepted if professionally relevant and if total FTE does not exceed . 49 .
(Federal law permits international students to work a maximum of 20 hours per week when they are in classes; therefore, international students working as graduate assistants are not allowed to hold any second appointments. Any exceptions to this rule would need prior approval by International Studies.)

## Q. WHAT IF ONE BECOMES SICK AND MISS WORK OR TAKE A VACATION?

Graduate assistants do not earn sick or vacation hours; please consult with the department/school/office concerning their policies.
Q. DO GRADUATE ASSISTANTS WORK WHEN OFFICES ARE OPEN BUT THE UNIVERSITY IS CLOSED FOR CLASSES?

Yes, generally, as the assistant is paid for 20 hours of work per week. Check with the department/school/office regarding their policy.

## Q. HOW LONG MAY ONE HOLD A GRADUATE ASSISTANTSHIP?

An assistantship may be awarded on an academic/calendar or semester-by-semester basis. Students working towards a master's degree may not hold an assistantship for more than four semesters. Education Specialist students are limited to four semesters beyond the master's degree. Doctoral students are limited to six semesters beyond the master's degree. These appointments exclude summer sessions and assistantships may be extended on an individual basis upon written request of the Graduate Program Committee of the department and the approval of the Dean of Graduate Studies.

## Q. WHERE DO GRADUATE ASSISTANTS PARK THEIR CARS?

Graduate Assistants may purchase a faculty/staff parking pass from Parking. Once the pass is purchased, they are able to park in any area designated faculty/staff.

## Q. IS MONEY AVAILABLE FOR RESEARCH?

Students interested in research grant monies should contact the Office of Research and Creative Activity at 402-5542286 or via email at unosponpro@unomaha.edu.

## Travel and Research Grants

## Graduate Research and Creative Activity (GRCA)

GRACA grants support faculty-mentored graduate student research and creative activity. Grants of up to $\$ 5,000$ per student are available to UNO graduate students enrolled through fall 2013. For more information, please visit http://www.unomaha.edu/orca/graca.php

## GRADUATE DEGREE PROGRAMS \& GRADUATE MINORS

## Accounting

ACCOUNTING, M.A.
Department of Accounting, College of Business Administration
Vision Statement
The program provides a broad-based preparation for individuals seeking careers in public, private or not-forprofit organizations. By choosing specific elective courses, however, individuals desiring a particular career path may pursue an area of specialization such as Auditing, Information Systems, Financial Accounting, Managerial Accounting or Taxation.

For more information regarding these areas of specialization, please call (402)554-3650 or visit the website at: http://cba.unomaha.edu/acct/MACC/index.cfm.

The MACC program is designed for dedicated students with career aspirations demanding a high level of accounting expertise. As such, the program involves both intensive and extensive professional preparation.

Upon completion of the program, most students will have the educational prerequisites for the following professional examinations:

Certified Public Accountant (CPA)
Certified Management Accountant (CMA)
Certified Financial Manager (CFM) and
Certified Internal Auditor (CIA).

## Program Contact Information

Dr. Burch Kealey, Graduate Program Chair
Mammel Hall (MH) 228CC
6708 Pine Street
402-554-3571
bkealey@unomaha.edu
Program Website:
http://cba.unomaha.edu//MACC/home.cfm

## Application Deadlines:

Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International students must provide statements of financial independence, and evidence of ability to speak and write the English language; i.e., a minimum of 600 on the paper-based TOEFL ( 250 if computerbased; 100 if internet-based). The baccalaureate degree must have been received from a properly accredited institution.
- GMAT Requirement:
- Students who have completed at least nine (9) hours of upper division (3000-4000 level or equivalent) accounting courses at an AACSB-accredited College of Business with an overall and upperdivision accounting GPA of at least 3.33 on a 4.0 scale may be admitted on that basis and thus are exempt from the GMAT requirement.
- Students who have either not completed a minimum of nine (9) hours of upper-division accounting courses from an AACSB-accredited College of Business or who have completed those hours but did not earn a 3.33 minimum GPA may be admitted by taking the GMAT and scoring at least 550 . The student must score in at least the 26th percentile on the verbal section and the 35th percentile on the quantitative section of the GMAT. For students seeking admission on the basis of their GMAT score, we also require a minimum GPA of 3.0 (on a 4.0 scale) in their undergraduate program. If the applicant's undergraduate degree is in Accounting, then we further require a minimum 3.0 overall upper-division Accounting GPA. Students with a GPA less than 3.0 may petition for admission after they have submitted a satisfactory GMAT score.

Generally, we apply a formula ( 200 * undergraduate GPA) + GMAT $>$ or $=1170$.

- Note: Students who have met either set of admission requirements above, but who have not completed all of the foundation course requirements (listed below), will be admitted provisionally. Provisionally admitted students must earn a minimum grade of B ( 3.0 on a 4.0 scale) in all foundation courses taken to satisfy the requirements set out in their provisional admittance. Further, provisionally admitted students must maintain an overall GPA of "B" ( 3.0 on a 4.0 scale).


## MACC DEGREE REQUIREMENTS

## MACC Required Core Courses ( $\mathbf{1 5}$ hours):

Select any five of the following courses:
ACCT 8210 Financial Accounting Theory 3
ACCT 8220 Graduate Topics in Income Taxation 3
ACCT 8230 Strategic and Operational Planning 3
and Control
ACCT 8250 Seminar in Accounting 3
ACCT 8260 Federal Tax Research and Planning 3
ACCT 8910 Special Topics in Accounting 3

## MACC Foundation Requirements ( $\mathbf{3 0}$ hours):

Courses successfully completed (i.e., earning a 2.0 grade, "C", or higher on a 4.0 scale) in the student's undergraduate program at a properly accredited four-year institution are considered as sufficient preparation. However, while students may earn a minimum grade of 2.0 in one or more individual courses in this list of foundation requirements, they must have an overall GPA in these courses of 3.0 or above. Otherwise, the student must complete the foundation requirements, earning a " $B$ " or better (3.0) prior to enrolling in a graduate course. As part of any admission, the student may be required to re-take one or more courses in which the individual grade is less than a "B" ( 3.0 on a 4.0 scale).
ACCT 2010 Principles of Accounting I 3
ACCT 2020 Principles of Accounting II 3
ACCT 3020 Basic Federal Income Taxation 3
ACCT 3030 Intermediate Financial Accounting I 3
ACCT 3040 Intermediate Financial Accounting II 3
ACCT 3050 Intermediate Managerial Accounting 3
ACCT 3080 Accounting Information Systems 3
OR
BSAD 3100 Management Information Systems OR
CIST 3100 Organizations, Applications, \& Technology
ACCT 4080 Principles of Auditing
BSAD 3160 Managerial Statistics for Business
BSAD 8180 Analytical Foundations of
Economics
OR

| ECON 2220 | Principles of Economics (Macro) | 3 |
| :--- | :--- | :--- |
|  | AND |  |
| ECON 2200 | Principles of Economics (Micro) | 3 |
| MGMT | Managerial Communications | 3 |
| 3200 | OR |  |
|  | an equivalent business |  |
|  | communications course |  |

Business Communications Course: Only needed if sitting for the CPA exam

## MACC Required Contemporary Business Environment Courses (9 hours):

Students who have completed courses in one or more of these areas must, in consultation with their MACC advisor, select another non-accounting graduate course(s).
BSAD 8010 Legal, Social and Ethical
Environment
BSAD 8400 Marketing Policies 3
BSAD 8500 Financial Management

## MACC Electives ( $\mathbf{1 2}$ hours):

In consultation with the MACC advisor, twelve (12) hours of additional graduate work must be selected.

These graduate courses can be taken in any area the student wishes. Students may select a minor in an area of interest. A minor usually requires nine (9) hours (no 8 - 6 courses) and the permission of the minor department/school.
ACCT 8076 Governmental/Nonprofit Accounting 3 and Auditing
*If you plan to sit for the Nebraska CPA exam, you must take this course.

## MACC Exit Requirements:

Select one of the three options below:

## Comprehensive Examination

ACCT 8900 Independent Research
BSAD 8990 Thesis 1-

ACCT 8900: Before registering for this course, a student must complete an ACCT 8900 Application Form. If ACCT 8900 is not taken as part of the program, a final comprehensive examination will be required. See the MACC advisor for details.

NOTE: MACC students may repeat only once any ACCT 8000- or 8-6-level course in which they receive any grade, including "W" or "I".

## MACC-Other Program-Related Information:

The MACC program offers a 150 -hour undergraduategraduate option that requires UNO undergraduate accounting majors to apply to the MACC program before they achieve senior status. UNO undergraduate accounting majors should see the Director of the MACC program in
their junior year to determine how they can enroll in this joint program. An important benefit of the 150 -hour program is that it allows the student to earn an undergraduate degree (Bachelor of Science in Business Administration) and the MACC degree in a combined total of 150 hours (six hours less than the standard requirements for non-articulated programs). By applying early, the student will be able to take six hours of upper-division accounting courses (the courses eligible for this treatment are the cross-listed courses [4---/8--6] as graduate courses and receive credit for both their BSAD and MACC degrees. Given that most public accounting firms require 150 hours (so that all new hires are CPA exam-eligible), our dual program offers the most efficient way for students to prepare for licensure and have the courses they need to be competitive in today's market.

## Internships

Students in the 150 -hour MACC program are encouraged to apply for full- or part-time internships. Internships for international students may be available-see the Director of the MACC program for details. The MACC program does not grant graduate credit for internships, nor is an internship required for the program. Students seeking information about internships should see the Accounting Department's Director of Internships.

## Financial Assistance

A limited number of graduate scholarships, assistantships and non-resident tuition waivers are available to full-time students. Those interested in receiving an application may call (402)554-3650 or download an application from our website. Employed applicants should explore tuition reimbursement plans from their employers.
Total Credit Hours: 36

## Athletic Training

ATHLETIC TRAINING, M.A.

## School of Health, Physical Education, and Recreation, College of Education

Vision Statement
The mission of the Athletic Training Education Program at the University of Nebraska at Omaha is to prepare students for successful careers or advanced academic studies in the field of athletic training by providing comprehensive and progressive studies leading to national certification as an athletic trainer. The program will provide diverse experiences, both clinical and didactic, based on the competencies set forth by the NATA.

## Program Contact Information:

Dr. Melanie McGrath, Graduate Program Chair (GPC) Health Physical Education \& Recreation (HPER) 207V

402-554-2670
melaniemcgrath@unomaha.edu

## Program Website:

http://coe.unomaha.edu/hper/at/gradprog.php

## Application Deadlines:

- Summer: February 1
- Fall: N/A
- Spring: N/A


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required (minimum scores established by the Graduate Council).
- 500 for Written TOEFL
- 173 for computer-based TOEFL
- 61 for internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- 

Minimum cumulative undergraduate GPA of 3.0 (on a 4.0 scale) is required for unconditional admission.

- Students with a 2.70-2.99 cumulative GPA may apply and be admitted provisionally. Provisional admission typically means that the admitted student must maintain a 3.0 GPA or higher, and earn " $B$ " or higher on all courses during the first 12 hours of graduate coursework.
- International applicants are recommended to have a TOEFL score of 80 or higher (internet-based test) or 550 or higher (written test) in order to be considered a strong candidate for admission.
- 

Entrance Exam

- Minimum cumulative score on the Graduate Record Examination (GRE) General Test of 287 (Verbal + Quantitative)
- A cumulative score of 300 is preferred for applicants to the UNO Graduate ATEP.
- 

For GRE scores prior to August 1, 2011, the following scores apply:

- Minimum: 800 (Verbal + Quantitative)
- Preferred: 1000
- 

Two (2) Letters of Recommendation are required

- These individuals should be able to speak about your abilities as a student, your leadership and problem-solving skills, and your potential as an athletic training student.
- 

Statement of Purpose

Address the following in under 1000 words:

- What is/are your primary career goal(s)?
- What in your life has most directly influenced your choice of becoming an Athletic Trainer?
- Describe your ATTRIBUTES that you feel are clearly and directly related to the profession of Athletic Training.
- Why should you be selected for the University of Nebraska at Omaha Graduate Athletic Training Education Program?
- 

Applicants who received their bachelor's degree from an institution other than UNO must provide the course syllabi and course outlines/schedules, in order to provide evidence that specific National Athletic Trainers' Association Educational Competencies and Proficiencies have been completed.

- Applicants must complete a minimum of 25 hours of observation with a certified athletic trainer (ATC).
- These hours should be completed in the 12 -month period prior to application to the program. For students with more than 25 hours, a minimum of 25 hours must be completed in the 12-month period prior to application.
- Applicants that are currently enrolled in a prerequisite ("deficiency") course at the time of application must send in a Deficiency Report for that course. This Deficiency Report must be sent directly to the Athletic Training Education Program (ATEP), HPER 207,

University of Nebraska at Omaha, 6001 Dodge St, Omaha, NE 68182.
-

All graduate candidates accepted to the UNO Athletic Training Program:

- Who received their bachelor's degree from another institution must provide the course syllabi and course outlines/schedules in order to provide evidence that specific National Athletic Trainers' Association Educational Competencies and Proficiencies were completed.
- Must show proof of current Cardiopulmonary Resuscitation for the Professional Rescuer and Healthcare Provider, and Basic First Aid Certification prior to admission. Certification must remain current through April of the applicant's first year in the program. Certification by the American Red Cross is strongly preferred. Students are required to maintain these certifications throughout the entire academic program.
- Must provide proof of physical examination and required vaccinations prior to admission. The physical exam must be completed within 12 months of the first day of our summer session course (typically the second week of July).


## MA-ATHT DEGREE REQUIREMENTS

The following seven (7) undergraduate prerequisites (deficiencies) must be completed with a grade of "C" or better:
PE 1800 Fitness for Living 3
PE $2880 \quad$ Basic Physiology and Anatomy for 5

## HPER

PE 4010 Laboratory Methods in Exercise 6 Science
PE 4630 Biomechanics 3
PE $4940 \quad 3$
HPER 3090 Applied Nutrition 3
PSYC 1010 Introduction to Psychology I 3
PE 4010: This course may be taken during a student's graduate work on a case-by-case basis.
MA-ATHT Required Courses ( $\mathbf{3 6}$ hours):
HPER 8030 Research in Health, Physical
Education and Recreation
PE 8040 Applied Statistics in Physical 3
Education
PE $8310 \quad$ Athletic Training Techniques 3
PE 8316/PE Lower Extremity Evaluation 4
4310
PE 8326/PE Upper Extremity Evaluation 4
4320
PE 8336/PE Athletic Therapeutic Modalities
4

PE 8346/PE
4340
PE 8356/PE
4350
PE 8360
PE 8910
PE 8966/PE 4960

## MA-ATHT-Electives ( 6 hours):

Students must complete six (6) graduate hours of electives to be chosen with their advisor. Elective courses must end in " 0 ". For more information, please visit our website, http://coe.unomaha.edu/hper/at/at_index or call (402)5542670.

## MA-ATHT-Other Requirements:

Once admitted to the Athletic Training Education Program, the student will obtain clinical hours as part of course requirements. Students will be expected to obtain an average of 20 hours of clinical experience per week during each fall and spring semester, which include some nights, weekends, and travel. Required clinical experiences must be obtained over a minimum of six (6) semesters.

## MA-ATHT-Exit Requirements:

In order to graduate with an MA in Athletic Training, the following criteria must be met:

## Successful completion of:

PE 8310 Athletic Training Techniques
PE 8316/PE Lower Extremity Evaluation
4310
PE 8326/PE Upper Extremity Evaluation
4320
PE 8336/PE Athletic Therapeutic Modalities
4330
PE 8346/PE Rehabilitation Techniques in
Athletic Training
PE $8356 /$ PE
4350
PE 8360
PE 8966/PE Topics in Sports Medicine
4960
PE 8910 Internship in Exercise Science
with a "B" or higher
Cumulative GPA of 3.0 or higher
Successful completion of a Comprehensive Examination
administered during the student's final semester

Successful completion of all clinical education requirements<br>as given in course syllabi and the Athletic Training Student Handbook<br>Total Credit Hours: 42<br>Biology<br>\section*{BIOLOGY, M.S.}

Department of Biology, College of Arts and Sciences

## Vision Statement

The goal of the Biology Department is to provide students with individualized, broad training in biology leading to a Master of Science (M.S.) degree. Original research is an integral part of both the thesis and non-thesis degree options. Faculty areas of expertise include ecology, physiology, genetics, molecular biology, taxonomy, behavior, and developmental biology of a wide variety of organisms. The M.S. degree prepares students for employment in industry, private or government agencies, and academics, as well as further education in professional programs, such as the Ph.D. or M.D.

## Program Contact Information:

Dr. Ann Antlfinger, Graduate Program Chair (GPC)
Allwine Hall (AH) 514A
402-554-2256
aantlfinger@unomaha.edu
Program Website:
http://www.unomaha.edu/biology/grad.php

## Application Deadlines:

- Fall: February 15
- Spring: October 15
- Summer: February 15


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- The applicant's GPA in undergraduate biology courses will be determined and must be 3.0 or above (on a 4.0 scale)
- An applicant must normally present 24 semester hours of credit in the biological sciences, including genetics, ecology and molecular/cell biology. Preparation in the supporting sciences must include a course in inorganic or introductory chemistry, a course in organic chemistry or biochemistry, a course in introductory physics and a course in mathematics (college algebra, trigonometry or calculus) or statistics. Students with inadequate backgrounds in biology or the supporting sciences may be admitted provisionally and will be required to complete courses in the named areas.
- Applicants for whom English is not the language of nurture should have a minimum TOEFL of 550 (213 if computer-based; 95 if internet-based) or IELTS of 7.0 or PTE of 65.
- If applying for financial support as a Graduate Assistant, applicants for whom English is not the language of nurture should take the internet-based TOEFL, the IELTS, or the PTE.
- Entrance Exam
- Graduate Record Exam (GRE) General Test with a combined score (verbal + quantitative) of 1000 (if test was taken before August 1, 2011) or 297 (if test was taken after August 1, 2011) and a minimum writing score of 3.5.
- Three (3) Letters of Recommendation
- Statement of Purpose
- The Biology Department encourages applicants to contact a professor whose research interests overlap with their own goals for graduate research. Please indicate in your Statement of Purpose who you have contacted or plan to contact.
- Applicants not meeting the criteria in terms of GPA or standardized test scores may provide written evidence of experience or potential to perform outstanding graduate work and petition the department for provisional admission as long as their Biology GPA is above the 2.7 minimum set by the Graduate College. Provisional admission will not be removed until the student has earned at least the grade of "B" (3.0 on a 4.0 scale) in each course involved in the first 12 hours of graduate study. Questions about requirements for admission should be directed to the Department of Biology.


## MS-BIOL-REQUIRED COURSES:

Thesis Option (30 hours):
BIOL 8010 Seminar in Biology
At least $50 \%$ of the 30 credit hours required will be taken in 8000-level (graduate only) courses.

Electives:
To be determined by the student, advisor and supervisory committee; graduate courses in other departments may be included

| Non-Thesis | Option (36 hours): |  |
| :--- | ---: | ---: |
| BIOL 8010 | Seminar in Biology | 1 |
| BIOL 8020 | Independent Research in Biology | $1-$ |
|  |  | 3 |

## At least $50 \%$ of the 36 credit hours will be taken in 8000-level (graduate only) courses.

## Electives:

To be determined by the student, advisor and supervisory committee; graduate courses in other departments may be included

## MS-BIOL-Exit Requirements:

Graduate students are expected to attend the Graduate Seminar (8010) even when not registered for it.

## Thesis Option:

BIOL 8990 Thesis 1 -

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval and submission of a thesis.

## Non-Thesis Option:

Comprehensive Examination

## TOTAL CREDIT HOURS:

Thesis Option: 30
Non-Thesis Option: 36

## MS-BIOL-Other Program-Related Information:

The Department of Biology annually awards 17 graduate teaching assistantships. New applicants should submit an application by February 15 for the fall semester and October 15 for the spring semester. Applications may be downloaded from the Biology Graduate Program website (http://www.unomaha.edu/biology/grad.php\#financialaid). For information regarding stipends, go to Graduate Assistant Policies. The teaching assistantships require 20 hours per week of teaching and/or other assignments.

## Business Administration

M.B.A.

## Department of Business Administration, College of Business Administration

## Vision Statement:

The mission of UNO's MBA program is to prepare students to contribute significantly to organizational productivity through learning experiences emphasizing the application of sound and innovative business techniques. Through acquiring the knowledge and abilities necessary to be influential, innovative, a problem solver and socially responsible, the graduate of the UNO MBA program will be an effective leader in enhancing organizational productivity. The graduate will be well prepared for a responsible management position and will have an understanding of the technological and global business environment.

In addition to developing a strong background in the functional areas of business, the UNO MBA program focuses on developing the following essential leadership capabilities in its graduates:

- Influential Leader
- Effective Communicator
- Teamwork Skills
- Innovative Leader
- Change Agent
- Entrepreneurial
- Technologically Informed
- Internationally Aware
- Problem Solving Leader
- Information Gathering and Analysis
- Critical Thinker
- Planner
- Socially Responsible Leader
- Ethical
- Environmentally Aware
- Involved in the Community


## Program Contact Information:

Dr. Donald Baum, Graduate Program Chair (GPC)
Mammel Hall (MH) 332D
6708 Pine Street
402-554-2538
dbaum@unomaha.edu

Ms. Lex Kaczmarek, Director
Mammel Hall (MH) 300
6708 Pine Street
402-554-2303
lkaczmarek@unomaha.edu
Program Website:
http://cba.unomaha.edu/mba

## Application Deadlines:

- Fall: July 1
- Spring: November 1
- Summer: April 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 for written TOEFL
- 173 for computer-based TOEFL
- 61 for internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Admission will not be considered for any student whose record does not include at least a 2.75
Junior/Senior GPA and a 470 GMAT
- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the United States, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL scores. The minimum TOEFL score required for the MBA is 550 for the paper test, 213 for the computer-based test, or 79 for the internet-based test. A 6.5 is the minimum score for the IELTS.
- Entrance Exam
- 500 GMAT (minimum 20th percentile for both the verbal and quantitative portions is required); OR
- 293 GRE (minimum 20th percentile for both the verbal and quantitative portions is required)
- Resume
a. Include Employment and Educational History
- Foundation courses: A student must have completed basic courses in the following areas, either as an undergraduate student or prior to enrolling in the first MBA course:
- Accounting: BSAD 8110 or one year of Principles of Accounting at the undergraduate level (ACCT 2010 and 2020)
- Economics: BSAD 8180 or Macro- and MicroEconomics at the undergraduate level (ECON 2200 and 2220)
- Managerial Statistics for Business: BSAD 3160 or one semester of statistics at a four-year institution
- College Algebra: MATH 1320 or two semesters of college algebra at the undergraduate level
- English : (international students only) English Composition is a required foundation course for all international students admitted to the MBA program. The English Composition requirement must be satisfied within the first two semesters of a student's program.
- Courses successfully completed ("A,"" "B," or "C" grades) in the student's undergraduate program at a four-year institution are considered as sufficient preparation. Otherwise, the student must complete foundation requirements prior to enrolling in the first MBA course with a minimum B (3.0 on a 4.0 scale) grade. Additional remediation may be identified as part of the BSAD 8060 - Essential Leadership Skills evaluation. Foundation courses including BSAD 8110 and BSAD 8180, as well as additional, identified remediation, may not be used on a plan of study.
- Unconditional Admission: may be granted to an applicant whose record includes at least the following:
- 2.85 Junior/Senior GPA, AND
- 500 GMAT (minimum 20th percentile for both the verbal and quantitative portions required)
- Resume (employment and education history)
- Applicants qualifying for Unconditional Admission, based on the standards outlined above, but lacking some foundation courses, will be granted provisional status until all foundation courses are completed with grades of "B" ( 3.0 on a 4.0 scale) or above.
- Provisional Admission: Applicants who do not meet the conditions for Unconditional Admission may be considered for Provisional Admission status.

Applicants will be notified that the Graduate Program Council (GPC) will evaluate the files of all applicants being considered for Provisional Admission. Candidates being considered for admission on this basis will receive notification of the outcome by August 1 or December 1 for the Fall or Spring semesters, respectively. If granted Provisional Admission, the student must earn minimum "B" (3.0 on a 4.0 scale) grades in each of the first four MBA courses completed. Students not meeting this standard are subject to dismissal.

## MBA DEGREE REQUIREMENTS

## MBA Required Courses ( $\mathbf{2 7}$ hours):

For students with an undergraduate major or graduate degree in accounting, economics, finance, law, management, management information systems or marketing, the core course(s) corresponding to the student's undergraduate major(s) or graduate degree(s) will be waived. The waived core course(s) will not satisfy degree requirements. For each core course waived, the student's plan of study will include an additional elective. BSAD 8060 Essential Leadership Skills 3
BSAD 8010 Legal, Social and Ethical 3

## Environment

BSAD 8030 Information Technology in Business 3
BSAD Managerial Economics
8100/ECON
8210
BSAD 8200
BSAD 8310 Managing Performance in 3
Organizations
BSAD 8400 Marketing Policies 3
BSAD 8500 Financial Management 3
BSAD 8060: first graduate-level course MBA students must complete)

BSAD 8500: (prerequisite: completion of BSAD 8100 \& BSAD 8200)

## Strategic Capstone Course:

BSAD 8800 Policy, Planning and Strategy

## Business Case Requirement:

Students admitted to the MBA program are required to complete a Business Case prior to graduation. The purpose of the case is to integrate and synthesize topics learned in MBA core courses through a comprehensive case writing project. Students will select a company during Essential Leadership Skills (BSAD 8060), their first course in the program. They will research and track the company, completing assignments relevant to each subject area as they progress through the various MBA core courses. They will develop a portfolio on the company. Final analysis and write-up occurs in the capstone course, Policy, Planning and Strategy (BSAD 8800). Students will
individually prepare a case analysis based on their portfolio.

## MBA Electives (9 hours):

Electives may be chosen from MBA, master's level Accounting and Economics, as well as in other departments as listed below.

A maximum of nine (9) hours of dual-level (graduate/undergraduate) electives may be included in the plan of study for an MBA degree.

MBA policy limits the number of Special Topics/Special Studies (BSAD 8910/8916) electives to a maximum of 9 hours, which may be applied to the MBA program as electives.

| Accounting Electives: |  |  |
| :---: | :---: | :---: |
| ACCT 8016 | Advanced Financial Accounting | 3 |
| ACCT | Tax Issues for Decision-Making | 3 |
| 8036/ACCT |  |  |
| 4030 |  |  |
| ACCT 8046 | Advanced Federal Income Taxation | 3 |
| ACCT | Advanced Managerial Accounting | 3 |
| 8066/ACCT |  |  |
| 4060 |  |  |
| ACCT 8076 | Governmental/Nonprofit Accounting and Auditing | 3 |
| ACCT | Information Systems Auditing | 3 |
| 8096/ACCT |  |  |
| 4090 |  |  |
| ACCT 8210 | Financial Accounting Theory | 3 |
| ACCT 8220 | Graduate Topics in Income Taxation | 3 |
| ACCT 8240 | Professional Problems | 3 |
| ACCT 8250 | Seminar in Accounting | 3 |
| ACCT 8260 | Federal Tax Research and Planning | 3 |
| ACCT 8270 | E-Business and the Accounting Profession | 3 |
| ACCT 8900 | Independent Research | 3 |
| ACCT 8910 | Special Topics in Accounting | 3 |
| Business Administration Electives: |  |  |
| BSAD 8000 | Quantitative Analysis | 3 |
| BSAD | Environmental Economics and | 3 |
| 8020/ECON | Management |  |
| 8020 |  |  |
| BSAD | Research Methods in Economics and | 3 |
| 8026/ECON | Business |  |
| 8296/ECON |  |  |
| 4290 |  |  |
| BSAD 8040 | Applied Quantitative Analysis | 3 |
| BSAD 8050 | Business Conditions Analysis | 3 |
| BSAD 8070 | Applied Multivariate Statistics | 3 |
| BSAD | Business Forecasting | 3 |
| 8080/ECON |  |  |
| 8310 |  |  |
| BSAD | Principles of Collaboration | 3 |
| 8096/MGMT |  |  |


| 4090 |  |  |
| :---: | :---: | :---: |
| BSAD 8300 | Organization Theory and Design | 3 |
| BSAD 8320 | Seminar in Human Resource | 3 |
|  | Management |  |
| BSAD | Sales Management | 3 |
| 8326/MKT |  |  |
| 4320 |  |  |
| BSAD 8340 | International Business Study Abroad | 3 |
| BSAD 8350 | Seminar in Management | 3 |
| BSAD | E-Marketing | 3 |
| 8366/MKT |  |  |
| 4360 |  |  |
| BSAD | Business Demographics | 3 |
| 8426/MKT |  |  |
| 4420 |  |  |
| BSAD 8430 | Strategic Brand Management | 3 |
| BSAD 8450 | Seminar in Marketing | 3 |
| BSAD 8510 | Security Analysis | 3 |
| BSAD 8520 | Seminar in Investment Management | 3 |
| BSAD 8530 | Banking \& Financial Markets: | 3 |
|  | Structure, Function, \& Policy |  |
| BSAD 8540 | Multinational Financial | 3 |
|  | Management |  |
| BSAD 8550 | Seminar in Finance | 1 - |
| BSAD | State and Local Finance | 3 |
| 8566/FNBK |  |  |
| 4560 |  |  |
| BSAD | Risk Management For Business | 3 |
| 8596/FNBK | Managers |  |
| 4590 |  |  |
| BSAD 8600 | Real Estate and Land Use | 3 |
|  | Economics Theory |  |
| BSAD | Financial Risk Management | 3 |
| 8606/FNBK |  |  |
| 4600 |  |  |
| BSAD 8610 | Current Problems in Real Estate and | 3 |
|  | Land Use Economics |  |
| BSAD 8620 | Valuation of Intellectual Property | 3 |
| BSAD | Economics of eBusiness | 3 |
| 8706/ECON |  |  |
| 4700/ECON |  |  |
| 8706 |  |  |
| BSAD | Economics of Entrepreneurship | 3 |
| 8736/ECON |  |  |
| 4730/ECON |  |  |
| 8736 |  |  |
| BSAD 8750 | Telecommunications in Business | 3 |
| BSAD 8810 | Applied Strategic Leadership | 3 |
| BSAD | The Arts and the Executive | 3 |
| 8880/FINA |  |  |
| 8010 |  |  |
| BSAD 8900 | Independent Research | $1-$ |
| BSAD 8910 | Special Topics in Business | 1 - |


| BSAD | Special Topics in Economics |
| :---: | :---: |
| 8916/ECON |  |
| 8916/ECON |  |
| 4910 |  |
| Economics Electives: |  |
| ECON 8010 | Seminar: Public Finance |
| ECON 8160 | Seminar in Labor Economics |
| ECON 8200 | Seminar in Micro Theory |
| ECON | Industrial Organization |
| 8216/ECON |  |
| 4210 |  |
| ECON 8220 | Seminar in Macro Theory |
| ECON | History of Economic Thought |
| 8266/ECON |  |
| 4260 |  |
| ECON | Research Methods in Economics and |
| 8296/ECON | Business |
| 4290/BSAD |  |
| 8026 |  |
| ECON 8300 | Econometrics |
| ECON | Quantitative Applications in |
| 8306/ECON | Economics and Business |
| 4300 |  |
| ECON | Natural Resource Economics |
| 8326/ECON |  |
| 4320 |  |
| ECON | Economics of Technology |
| 8346/ECON |  |
| 4340 |  |
| ECON 8450 | Seminar in Money and Banking |
| ECON | Monetary Theory and Policy |
| 8456/ECON |  |
| 4450 |  |
| ECON 8600 | Health Economics |
| ECON | International Trade |
| 8616/ECON |  |
| 4610 |  |
| ECON | International Monetary Economics |
| 8626/ECON |  |
| 4620 |  |
| ECON 8650 | Seminar in International Economics |
| ECON | International Economic |
| 8666/ECON | Development |
| 4660 |  |
| ECON | Economics of eBusiness |
| 8706/ECON |  |
| 4700/BSAD |  |
| 8706 |  |
| ECON | Economics of Entrepreneurship |
| 8736/ECON |  |
| 4730/BSAD |  |
| 8736 |  |
| ECON 8850 | Seminar in Urban Economics |
| ECON 8870 | Seminar in Regional Economics |

ECON 9816 Special Topics in Economics
Health Education Electives:
HED 8600 Health Behavior 3
HED 8750 Health Education: Instrmentation 3
and Evaluation
HED 8950 Public Health Leadership and Advocacy

Information Systems and Quantitative Analysis Electives:

| ISQA 8106 | Information Systems Architecture <br> and Organization | 3 |
| :--- | :--- | :--- |
| ISQA 8110 | Structured Software Design | 3 |
| ISQA | Advanced Statistical Methods for | 3 |
| 8156/ISQA | IS\&T |  |
| 4150 |  |  |
| ISQA 8160 | Applied Distribution Free Statistics | 3 |

ISQA 8186 Electronic Commerce 3

ISQA 8196 Process Reengineering with 3
Information Technology
Information and Data Quality 3
Management
Management of Software 3
Development
Advanced Systems Analysis and 3
Design
Telecommunications Management
ISQA
8230/CSCI
8220
ISQA 8250
Facilitation of Collaborative
Problem Solving
ISQA 8310 Data Communications 3
ISQA 8340 Applied Regression Analysis 3
ISQA 8380 Managing the Distributed
Computing Environment
ISQA 8400 Clinical Systems Architecture and
Function
ISQA 8410 Database Management 3
ISQA 8420 Managing the IS Function 3
ISQA Graphical User Interface
8525/ISQA
3520
ISQA 8530
ISQA
8546/CIST
4540
ISQA 8560
ISQA 8570 Information Security Policy and
Ethics
ISQA 8580 Security Risk Management and
Assessment
IT Audit and Control

3

1SQA
8596/ISQA
4590

| ISQA 8700 | Data Warehousing: Theory and Practice | 3 |
| :---: | :---: | :---: |
| ISQA 8736 | Decision Support Systems | 3 |
| ISQA 8810 | Information Technology Project Fundamentals | 3 |
| ISQA 8820 | Project Risk Management | 3 |
| ISQA 9120 | Applied Experimental Design and Analysis | 3 |
| ISQA 9130 | Applied Multivariate Analysis | 3 |
| Engineering Electives: |  |  |
| AE 8050 | Sustainable Building Design | 3 |
| $\begin{aligned} & \text { CIVE } \\ & \text { 898/CIVE } \end{aligned}$ | Special Topics in Civil Engineering | 6 |
| 498 |  |  |
| CONE 850 | Sustainable Construction | 3 |
| Public Administration Electives: |  |  |
| PA 8720 | Health Care Finance | 3 |
| PA 8740 | Health Care Policy | 3 |
| PA 8760 | The U.S. Health Care System | 3 |
| Psychology Electives: |  |  |
| PSYC | Psychological and Educational | 3 |
| 8316/PSYC | Testing |  |
| 4310 |  |  |
| PSYC | Organizational Psychology | 3 |
| 8636/PSYC |  |  |
| 4630 |  |  |
| PSYC | Personnel Psychology | 3 |
| 8646/PSYC |  |  |
| 4640 |  |  |
| PSYC 9030 | Seminar: Topics in Industrial | - |
|  | Organizational Psychology | 9 |
| PSYC 9320 | Seminar in Program Evaluation | 3 |
| PSYC 9620 | Industrial Training and | 3 |
|  | Organizational Development |  |
| PSYC 9630 | Leadership Theories and Research | 3 |
| PSYC 9660 | Criterion Development and Performance Appraisal | 3 |
| Speech and Communication Electives: |  |  |
| SPCH | Communication Training and | 3 |
| 8156/SPCH | Development Skills |  |
| 4150 |  |  |
| SPCH | Communication for Instructional | 3 |
| 8166/SPCH | Settings |  |
| 4160 |  |  |
| SPCH | Organizational Communication | 3 |
| 8176/SPCH |  |  |
| 4170 |  |  |
| SPCH | Communication Leadership and | 3 |
| 8186/SPCH | Power in Organizations |  |
| 4180 |  |  |
| SPCH | Computer-Mediated Communication | 3 |
| 8196/SPCH |  |  |
| 4190 |  |  |
| SPCH | Persuasion | 3 |

8516/SPCH
4510
SPCH Intercultural Communication 3
8536/SPCH
4530
SPCH Nonverbal Communication 3
8556/SPCH
4550
SPCH 8566
Communication, Teamwork, \& Facilitation
Conflict Mediation

COMM Topics in Speech Communication
8180

## Geography Electives:

| GERO |  |
| :--- | :--- |
| 8516/GERO | Long-Term Care Administration |

4510/PA
4510/PA
8516
Political Science Electives:
PSCI 8250 Seminar in Global Politics 3
OR
Middle East Politics 3
8705/PSCI
3700
Biology Electives:
BIOL 8616 Environmental Monitoring \& 3
BIOL Introduction to Environmental Law 3
8826/ENVN and Regulations
4820/PA
4820/PA
8826/BIOL
4820/GEOG
8826/GEOG
4820
With the prior, written approval of the Business Administration Graduate Program Council and the Dean of Graduate Studies, any independent research, special studies, or special topics graduate-level course from Accounting, Business Administration, or Economics, when such course has as its principal focus issues relevant to business administration and the concentration, may be substituted.

## M.B.A. Concentrations

See M.B.A. Concentrations (p. 28)

## MBA Exit Requirements:

## Comprehensive Examination

All students earning an MBA degree must complete a comprehensive examination or a comprehensive
examination equivalent. The comprehensive examination requires the student to demonstrate the knowledge gained from the core courses and the ability to synthesize that knowledge in the analysis of questions involving more than one concept. Completion of the integrative course BSAD 8800 with a grade of "B" ( 3.0 on a 4.0 scale) or better is equivalent to completion of the comprehensive examination.

If a student transfers in credit for the non-comprehensive examination components of BSAD 8800, then the student must pass a written comprehensive examination prepared by and graded by the Graduate Program Council.

## Thesis Option

MBA students may elect to complete a 6-hour thesis under the guidance of a Supervisory Committee. The student is responsible for compliance with all Graduate College and MBA Graduate Program Council rules and procedures with respect to formation of a Supervisory Committee and completion of a thesis. The student shall submit to the Supervisory Committee a document including: 1) a proposed Plan of Study; 2) a description of the student's research topic; and 3) the student's research methodology. The student shall make an oral defense of the document to the Supervisory Committee. The Supervisory Committee's approval shall be in writing. A Supervisory Committee's approval should be obtained at least seven months before the intended graduation date.

If a student elects to complete a thesis, then the Supervisory Committee of the thesis shall decide how the student will satisfy the comprehensive examination requirement and the business case requirement. The Supervisory Committee's written approval of the plan of study shall require either the student's completion of BSAD 8800 or a comprehensive examination (either written or oral) prepared by and graded by the Supervisory Committee.

## Other Requirements to Complete the Program

Participation in a minimum of three MBA Leadership Seminars prior to graduation.
Total Credit Hours: 36

## M.B.A. CONCENTRATIONS

## COLLABORATION SCIENCE (9 HOURS):

| Required (3 hours): |  |  |
| :---: | :---: | :---: |
| BSAD | Principles of Collaboration | 3 |
| 8096/MGMT |  |  |
| 4090 |  |  |
| Electives (6 hours): |  |  |
| ISQA 8250 | Facilitation of Collaborative | 3 |
|  | Problem Solving |  |

SPCH
8196/SPCH
4190
SPCH 8566

SPCH
8806/SPCH
4800

Computer-Mediated Communication

Communication, Teamwork, \& Facilitation Conflict Mediation

## ELECTRONIC BUSINESS (9 HOURS):

Must be selected from at least two different academic departments within the College of Business
Administration (CBA).
BSAD Special Topics in Economics 1-

8916/ECON
8916/ECON
4910
ECON Economics of Technology 3
8346/ECON
4340
ISQA 8186
ISQA 8310
ISQA
8525/ISQA
3520
ISQA 8530
ISQA 8570
Electronic Commerce 3
Data Communications 3
Graphical User Interface 3

E-Commerce Security 3
Information Security Policy and 3

Ethics
HEALTH CARE MANAGEMENT (9 HOURS):
Must be selected from at least two different academic departments and may be selected from the list below.
ECON 8600 Health Economics
GERO Long-Term Care Administration 3
8516/GERO
4510/PA
4510/PA
8516
HED 8600 Health Behavior 3
HED 8950 Public Health Leadership and 3 Advocacy
ISQA 8400 Clinical Systems Architecture and 3
Function
ISQA 8570 Information Security Policy and 3
PA $8720 \quad$ Health Care Finance 3
PA 8740 Health Care Policy 3
PA 8760 The U.S. Health Care System 3
HUMAN RESOURCE MANAGEMENT (9 HOURS):

Required:
BSAD 8320 Seminar in Human Resource 3

| Electives (6 hours): |  |  |
| :---: | :---: | :---: |
| Must be selected from two different academic departments from the list below: |  |  |
| BSAD 8300 | Organization Theory and Design | 3 |
| ECON 8160 | Seminar in Labor Economics | 3 |
| PSYC | Psychological and Educational | 3 |
| 8316/PSYC | Testing |  |
| 4310 |  |  |
| PSYC | Organizational Psychology | 3 |
| 8636/PSYC |  |  |
| 4630 |  |  |
| PSYC | Personnel Psychology | 3 |
| 8646/PSYC |  |  |
| 4640 |  |  |
| PSYC 9630 | Leadership Theories and Research | 3 |
| SPCH | Communication Training and | 3 |
| 8156/SPCH | Development Skills |  |
| 4150 |  |  |
| INTERNATIONAL BUSINESS (9 HOURS): |  |  |
| Must be selected from two different academic departments from the list below. |  |  |
| BSAD 8340 | International Business Study Abroad | 3 |
| BSAD 8540 | Multinational Financial | 3 |
|  | Management |  |
| BSAD 8620 | Valuation of Intellectual Property | 3 |
| ECON | International Trade | 3 |
| 8616/ECON |  |  |
| 4610 |  |  |
| ECON | International Monetary Economics | 3 |
| 8626/ECON |  |  |
| 4620 |  |  |
| ECON | International Economic | 3 |
| 8666/ECON | Development |  |
| 4660 |  |  |
| GEOG 8130 | Seminar in Economic Geography | 3 |
| PSCI 8250 | Seminar in Global Politics | 3 |
|  | OR |  |
| PSCI | Middle East Politics | 3 |
| 8705/PSCI |  |  |
| 3700 |  |  |
| SPCH | Intercultural Communication | 3 |
| 8536/SPCH |  |  |
| 4530 |  |  |
| INVESTMENT SCIENCE (9 HOURS): |  |  |
| Must be selected from two different academic departments from the list below. |  |  |
| Select two courses from the following: |  |  |
| BSAD 8510 | Security Analysis | 3 |
| BSAD 8550 | Seminar in Finance | 1 - |
|  |  | 3 |
| BSAD | Financial Risk Management | 3 |
| 8606/FNBK |  |  |

4600
Select one course from the following:
ECON 8230 Business Conditions Analysis 3
ECON 8300 Econometrics 3
ECON Business Forecasting 3
8310/BSAD
8080
ECON Monetary Theory and Policy 3
8456/ECON
4450
ISQA 8340 Applied Regression Analysis 3
RISK MANAGEMENT (9 HOURS):
Must be selected from two different academic
departments from the list below.
Select two courses from the following:
BSAD 8520 Seminar in Investment Management 3
BSAD 8550 Seminar in Finance 1 -

BSAD NBK Manag
8596/FNBK Managers
4590
BSAD Financial Risk Management 3
8606/FNBK
4600
Select one course from the following:
ACCT 8210 Financial Accounting Theory 3
ACCT 8230 Strategic and Operational Planning 3 and Control
ISQA 8530 E-Commerce Security 3
ISQA 8580 Security Risk Management and 3 Assessment
ISQA 8820 Project Risk Management

## SUSTAINABILITY (9 HOURS):

## Required:

BSAD Environmental Economics and 3

8020/ECON Management
8020

## Elective Courses (6 hours):

Select two courses from the following:
BIOL Introduction to Environmental Law 3
8826/ENVN and Regulations
4820/PA
4820/PA
8826/BIOL
4820/GEOG
8826/GEOG
4820
GEOG Conservation of Natural Resources 3
8016/GEOG
4010
GEOG 8130 Seminar in Economic Geography 3

| GEOG 8616 | Environmental Monitoring and <br> Assessment | 3 |
| :--- | :--- | ---: |
| AE 8050 | Sustainable Building Design | 3 |
| CIVE | Special Topics in Civil Engineering | $1-$ |
| 898/CIVE |  | 6 |
| 498 |  |  |
| CONE 850 | Sustainable Construction <br> ENV 840 |  |
|  | Public Health |  |

## BUSINESS FOR BIOSCIENTISTS CERTIFICATE

College of Business Administration; Department of Biology, College of Arts and Sciences

## Vision Statement

Over the past 30 years, the largest area of job growth for biomedical Ph.D.'s has been in the private sector with positions in biotechnology, pharmaceuticals, and other industries. Many of these jobs have business elements. However, the traditional training of a biomedical Ph.D. focuses on research and has no business training. This certificate program provides a basic understanding of business principles to biomedical Ph.D. students. While UNMC Ph.D. students receive extensive training in research methods and the principles of biology and medicine, they receive no formal training in business fundamentals. However, a significant portion of biomedical Ph.D. students obtain employment in pharmaceutical, biotechnology, and other industries. For students with these career goals, formal training in business would markedly enhance their career options and competitiveness for these industry positions.

With a certificate program, it is possible for students to obtain a basic understanding of business principles that is documented by a certificate program. This certificate will make their application for a variety of job positions more competitive and make them more successful in their careers.

## Program Contact Information:

Dr. Donald Baum, Graduate Program Chair (GPC)
Mammel Hall (MH) 332D
6708 Pine Street
402-554-2538
dbaum@unomaha.edu

Ms. Lex Kaczmarek, Director
Mammel Hall (MH) 300
6708 Pine Street
402-554-2303
lkaczmarek@unomaha.edu
Application Deadlines:

- Fall: July 1
- Spring: November 1
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- All applicants must have earned a minimum Junior/Senior GPA of 2.85 .
- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the United States, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL scores. The minimum TOEFL score required for this certificate program is 550 for the paper test or 213 for the computer-based test or 79 for the internet-based test; or a 6.5 on the IELTS.
- Entrance Exam
- Official GMAT score: minimum GMAT score of 500 with a minimum 20th percentile for both the verbal and quantitative portions, or 293 on the Graduate Record Exam (GRE) (minimum 20th percentile for both verbal and quantitative sections).
- Resume
- Include sections detailing applicants' employment and educational history


## CERT-BSBS DEGREE REQUIREMENTS

| Cert-BSBS Required Courses (15 hours): |  |  |
| :---: | :---: | :---: |
| Foundation Courses (6 hours): |  |  |
| BSAD 8110 | Accounting and Financial Fundamentals | 3 |
| BSAD 8180 | Analytical Foundations of Economics | 3 |
| Required Courses (6 hours): |  |  |
| BSAD 8060 | Essential Leadership Skills | 3 |
| BSAD 8400 | Marketing Policies | 3 |
| Elective Courses (3 hours): select one course from the |  |  |
| BSAD | Managerial Economics | 3 |
| 8100/ECON |  |  |
| 8210 |  |  |
| BSAD 8200 | Managerial Accounting | 3 |
| BSAD 8310 | Managing Performance in Organizations | 3 |
| BSAD 8620 | Valuation of Intellectual Property | 3 |
| ISQA 8400 | Clinical Systems Architecture and Function | 3 |
| Cert-BSBS Exit Requirements (3 hours) |  |  |
| BSAD 8910 | Special Topics in Business | $1-$ |

All other classes in the program must have been completed prior to this course.
*** Redirect Link ***
*** MBAMIS ***
EXECUTIVE M.B.A.

## Executive MBA Department , College of Business Administration

## Vision Statement

The mission and overarching themes of the Executive MBA program are to provide experienced managers and professionals with an applied and integrative business management education that develops and furthers their critical thinking and leadership abilities so they can better manage resources, leverage information technology, understand diverse cultures, and effectively address strategic issues in a dynamic global economy.
The Executive MBA program is designed for middle- and upper-level managers, experienced professionals, and established business owners who have a vision for themselves and their firms. The weekend program format takes class members, as a group, through the carefully structure sequences of courses required to complete the degree in an 18-month period.

## Program Contact Information:

Dr. William Swanson, Graduate Program Chair (GPC)

Mammel Hall (MH) 100F
6708 Pine Street
402-554-2612
wswanson@unomaha.edu

## Program Website:

http://cba.unomaha.edu/xmba

## Application Deadlines:

- Fall: June 15


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required (minimum scores established by the Graduate Council)
- 500 on the Written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Professional and/or managerial/supervisory experience and accomplishments preferred
- A minimum of six (6) years of professional level work experience is required
- Statement of Purpose
- The Statement of Purpose should address the following: 1) What are your career objectives and how will a UNO Executive MBA assist you in attaining them? 2) Discuss your most outstanding personal and professional accomplishments. 3) What is the most significant strength that you bring to a workforce team?
- Resume
- Current resume detailing employment history, nature of duties and responsibilities, accomplishments, leadership roles, and community involvement
- Entrance Exam is Required
- The Graduate Management Admission Test (GMAT) is required for admission consideration for those candidates who do not have a graduate degree, and whose grade point average (GPA) on all three- and four-level (junior and senior) courses OR for all courses required in their undergraduate major OR for their last 60 credit hours of college/university is less than 3.0 on a 4.0 scale.
- The GMAT may be required for candidates with a 3.0 or better undergraduate GPA if their undergraduate degree is from a program characterized as significantly accelerated or for which academic credit is awarded for education and life experiences attained from other than an accredited university or college.
- The GMAT is not required for candidates who possess a graduate degree from a regionally accredited US university or college or who have an equivalent degree from another country.
- Any candidate for admission is welcome to submit GMAT scores for consideration if they feel the other selection considerations-undergraduate academic record and professional accomplishments-will not adequately reflect their ability to successfully complete a rigorous graduate education program.


## EMBA DEGREE REQUIREMENTS

| EMBA Required Courses: |  |  |
| :--- | :--- | ---: |
| BSAD 8240 | Leadership Development | 2 |
| BSAD 8260 | Accounting Theory and Practice | 2 |
| BSAD 8280 | Stewardship of the Firm's Resources: <br> Human Resources and Change | 4 |
|  | Management | 3 |
| BSAD 8360 | Financial Management for |  |
|  | Executives <br> Legal and Ethical Considerations in | 3 |
| BSAD 8370 | Business |  |
| BSAD 8380 | Quality \& Process Management | 2 |
| BSAD 8460 | Management and Organization | 3 |
|  | Theory |  |
| BSAD 8480 | Applications in Economics | 3 |
| BSAD 8490 | IT: Leveraging Technology for | 2 |
|  | Competitive Advantage | 3 |
| BSAD 8560 | Marketing Strategies |  |
| BSAD 8570 | Administrative Policy and Strategy | 3 |
| BSAD 8580 | International: Competing in Global | 3 |
|  | Markets |  |
| BSAD 8590 | Seminar in Business Administration | 3 |
| BSAD 8900 | Independent Research | $1-$ |
|  |  | 6 |

## Total Credit Hours: 42

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*** Redirect Link ***
*** Human-Resources-Training-Certificate ***
*** Redirect Link ***
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*** Human-Resources-and-Training-Concentrations ***
*** Redirect Link ***
*** Business-Administration-Minor ***
Communication

## COMMUNICATION, M.A.

## School of Communication, College of Communication, Fine Arts \& Media

## Vision Statement

The School of Communication offers a Master of Arts degree emphasizing a broad theoretical knowledge of speech and mass communication. Graduate students achieve in-depth knowledge of communication processes and effects and acquire the skills needed to discover new knowledge through research and other forms of scholarly activity. They also acquire skills and knowledge needed for professional growth. Graduate students conduct original research for a thesis or project.

School of Communication graduate faculty offer an impressive blend of academic and professional media and corporate experience. Faculty are actively involved in the discovery of new knowledge through publication in top scholarly journals. The faculty seek to cultivate students' breadth and depth of knowledge about communication, and to foster a spirit of free investigation.

## Program Contact Information:

Dr. Barbara Pickering, Graduate Program Chair (GPC)
Arts \& Science Hall (ASH) 107 O
402-554-2204
bpickering@unomaha.edu

## Program Website:

http://www.unomaha.edu/wwwcomm/gradstudents.php

## Application Deadlines:

- Fall: March 1
- Spring: October 1
- Summer: N/A


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International students are also required to have a minimum score of 550 on the TOEFL (213 if computer-based; 79-80 if internet-based; 53 on PTE)
- Three (3) Letters of Recommendation
- Statement of Purpose
- The Statement of Purpose should be 500 words in length and should answer the following questions:
- Why have you chosen the UNO School of Communication Master's degree program?
- What are your areas of scholarly interest and research?
- What are your personal or professional plans after you complete the Master's degree?
- Resume
- Identify Major and Minor field(s) of study, overall GPA, and GPA within major
- Unconditional Admission may be granted to a student whose record includes at least the following:
- Certification of a bachelor's degree from a regionally accredited institution
- Documentation through official transcripts using a 4.0 grade point scale of having earned at least:
- A 3.25 in communication undergraduate work, and
- Either a 3.0 overall undergraduate average or a 3.25 average in the last half of undergraduate credit hours, and
- Inclusion of at least 15 undergraduate semester hours of appropriate courses in communication, including sufficient advanced upper-division preparation in the area of graduate specialization
- Provisional Admission may be granted for reasons of experience, maturity or other circumstances to a student who does not meet the unconditional admission standards. In no case may a student be admitted who does not meet UNO Graduate College provisional admission standards. If granted provisional admission, the student must complete the first 12 hours of course work with a grade of "B" ( 3.0 on a 4.0 scale) or better.
- Applicants who have more than six hours of undergraduate deficiencies will be advised to remove them before applying for any type of admission
- Before deciding whether or not to recommend provisional admission, the School's graduate faculty may require any one or any combination of the following:
- Completion of prescribed course(s) (not for graduate credit) with a grade of " B " ( 3.0 on a 4.0 scale) or better; and/or
- Passing such test(s) as faculty members deem necessary in order to determine whether the applicant is adequately prepared for graduate study


## MA-COMMUNICATION DEGREE REQUIREMENTS

## MA-COMM Required Courses (12-15 hours):

Completion of Core Classes: The Core courses provide basic, intensive and broad coverage of communication as a field of advanced study. The Core integrates mass and speech communication theories and research methodologies. If a student fails to achieve an average grade of "B" ( 3.0 on a 4.0 scale) in the overall Core, the student may retake each Core course with a grade below " B " once, and must obtain an average grade of " B " or higher to remain in the program.
Graduate students entering the UNO School of Communication Master's degree program must:

Complete either the COMM 8570 Foundations in Mass Communication or COMM 8470 Foundations Seminar: Communication Studies in the first semester of coursework

Complete either COMM 8020 Qualitative Research Methods or COMM 8010 Quantitative Research Methods before the third semester of coursework

Complete all 4 Core classes within their first 18 hours of coursework as a degree student (This requirement may be waived for students entering the Communication graduate program with approved graduate credits to be used in the plan of study.)

## Thesis Option Required Core Courses (12 hours):

The 12 hours of required courses listed below must be completed with an average grade of "B" or better COMM Seminar in Communication 3 8010 Research: Quantitative Emphasis COMM Seminar in Communication 8020 Research: Qualitative Emphasis COMM Foundations Seminar: Communication Studies Foundations of Mass Communication

## Project Option Required Core Courses (15 hours):

The 12 hours of required courses listed below must be completed with an average grade of "B" or better

| COMM | Seminar in Communication |
| :--- | :--- |
| 8010 | Research: Quantitative Emphasis |
| COMM | Seminar in Communication |
| 8020 | Research: Qualitative Emphasis |
| COMM | Foundations Seminar: |
| 8470 | Communication Studies |
| COMM | Foundations of Mass |
| 8570 | Communication |

Those who select the Project Option must take an additional graduate-only seminar

## MA-COMM Electives (Thesis, 12 hours; Project, 21 hours):

No more than 9 hours (Thesis option) or 12 hours (Project option) from outside the school may be counted toward degree requirements in consultation with the graduate program chair
MA-COMM Exit Requirements:
Thesis Option
COMM Independent Study 1 -
8980
All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval and submission of the thesis.

## Project Option

COMM Graduate Project

The project, in lieu of a thesis, is based on a proposal approved by the student's committee. The student must complete a project which is defended orally before his or her project committee.

## MA-COMM SPECIALIZATIONS:

The School of Communication has compiled a list of graduate specializations. These specializations, while not required, are designed to enhance the depth and breadth of graduate student knowledge in specialized areas within the field of Communication. Students may also create their own areas of specialization based on personal interest or in preparation for specific careers.

| Communication Law, Technology and Policy |  |
| :--- | :--- |
| BRCT | Media Regulation \& Freedom |
| 8346/BRCT |  |
| 4340 |  |
| BRCT 8396 | Media Management |
| JOUR 8926 | Media Literacy |
| COMM |  |
| 9400/ISQA | Technology |

9900
JOUR Mass Media Ethics
8406/JOUR
4400
JOUR Communications Law 3
8416/JOUR
4410
JOUR Theories of the First Amendment: 3
8426/JOUR Speech and Press
4420
SPCH Computer-Mediated Communication
8196/SPCH
4190
Conflict Resolution
$\begin{array}{ll}\text { SPCH Communication Training and } & 3 \\ \text { 8156/SPCH } & \text { Development Skills }\end{array}$
8156/SPCH Development Skills
4150
SPCH Intercultural Communication 3
8536/SPCH
4530
SPCH Conflict Mediation 3
8806/SPCH
4800
SPCH Persuasion 3
8516/SPCH
4510
SPCH Interpersonal Conflict 3
8706/SPCH
4700
SPCH 8560 Communication Teamwork and 3

Possible Electives:
PSCI The Judicial Process 3
8056/PSCI
4050
PSCI Interest Groups 3
8175/PSCI
3170
SOC Collective Behavior 3
8026/SOC
4020
SOC 8556 Social Diversity in Organizations 3
SOC Social Change and Globalization 3
8756/SOC
4750
Interpersonal/Intercultural Communication
SPCH Communication and Human
8146/SPCH Relationships
4140
SPCH Persuasion
8516/SPCH
4510
SPCH Intercultural Communication

| 4530 |  |  |
| :---: | :---: | :---: |
| SPCH | Nonverbal Communication | 3 |
| 8556/SPCH |  |  |
| 4550 |  |  |
| SPCH | Communication Theory | 3 |
| 8606/SPCH |  |  |
| 4600 |  |  |
| SPCH | Interpersonal Conflict | 3 |
| 8706/SPCH |  |  |
| 4700 |  |  |
| SPCH | Conflict Mediation | 3 |
| 8806/SPCH |  |  |
| 4800 |  |  |
| SPCH | Health Communication | 3 |
| 8226/SPCH |  |  |
| 4220 |  |  |
| Possible Electives: |  |  |
| COUN 8520 | Counseling Multicultural and | 3 |
|  | Diverse Populations |  |
| EDAD 8710 | Interpersonal Relationships in | 3 |
|  | Educational Leadership |  |
| Instructional Communication and Training |  |  |
| SPCH | Communication Training and | 3 |
| 8156/SPCH | Development Skills |  |
| 4150 |  |  |
| SPCH | Communication for Instructional | 3 |
| 8166/SPCH | Settings |  |
| 4160 |  |  |
| SPCH | Communication Leadership and | 3 |
| 8186/SPCH | Power in Organizations |  |
| 4180 |  |  |
| SPCH | Persuasion | 3 |
| 8516/SPCH |  |  |
| 4510 |  |  |
| SPCH | Intercultural Communication | 3 |
| 8536/SPCH |  |  |
| 4530 |  |  |
| SPCH 8566 | Communication, Teamwork, \& | 3 |
|  | Facilitation |  |
| Possible Electives: |  |  |
| EDAD 9650 | Program Evaluation for Educational | 3 |
|  | Administrators |  |
| PSYC 9620 | Industrial Training and | 3 |
|  | Organizational Development |  |
| TED 8050 | New Ways of Knowing \& Education | 3 |
| New Media |  |  |
| COMM | Seminar in Popular Culture, Mass | 3 |
| 8200/ENGL | Media and Visual Rhetoric |  |
| 8760 |  |  |
| JOUR 8236 | Principles of Public Relations | 3 |
| JOUR | Mass Media Ethics | 3 |
| 8406/JOUR |  |  |
| 4400 |  |  |
| JOUR | Communications Law | 3 |


| 8416/JOUR |  |  |
| :--- | :--- | ---: |
| 4410 |  | 3 |
| JOUR 8926 | Media Literacy | 3 |
| JOUR | Mass Communication and Public |  |
| 8506/JOUR | Opinion | 3 |
| 4500 |  |  |
| BRCT | Political Broadcasting |  |
| 8316/BRCT |  | 3 |
| 4310 |  | 3 |
| BRCT 8396 | Media Management |  |
| SPCH | Computer-Mediated Communication | 3 |
| 8196/SPCH |  |  |
| 4190 |  |  |

Subtotal: 27

## Organizational Communication

SPCH Communication Training and 3
8156/SPCH Development Skills
4150
SPCH Organizational Communication 3
8176/SPCH
4170
SPCH Communication Leadership and 3
8186/SPCH Power in Organizations
4180
SPCH Persuasion 3
8516/SPCH
4510
SPCH Intercultural Communication 3
8536/SPCH
4530
SPCH Nonverbal Communication 3
8556/SPCH
4550
SPCH 8566 Communication, Teamwork, \& 3
Facilitation
Conflict Mediation 3
8806/SPCH
4800
Possible Electives:
BSAD 8310 Managing Performance in 3
Organizations
BSAD 8320 Seminar in Human Resource 3
Management
PA 8090 Organization Theory and Behavior 3
PA 8596 Techniques Topics in NonProfit 1 -
Management
PA 8706 Marketing in Public \& Non-Profit 3
Aviation Organizations
Psychological and Educational
3
8316/PSYC Testing
4310
PSYC 9030 Seminar: Topics in Industrial 3-
Organizational Psychology 9
PSYC 9630 Leadership Theories and Research 3

| Public Relations |  |  |
| :--- | :--- | ---: |
| JOUR | Public Relations Case Studies | 3 |
| 8246/JOUR |  |  |
| 4240 |  |  |
| JOUR | Mass Communication and Public | 3 |
| 8506/JOUR | Opinion |  |
| 4500 |  | 3 |
| BRCT 8306 | Electronic Media Management | 3 |
| SPCH | Persuasion | 3 |
| 8516/SPCH |  | 3 |
| 4510 |  |  |
| SPCH | Intercultural Communication |  |
| 8536/SPCH |  | 3 |
| 4530 |  | 1 |
| Possible Electives: |  |  |
| BSAD 8450 | Seminar in Marketing |  |
| PA 8596 | Techniques Topics in NonProfit | 3 |
| PA 8710 | Management | Fund Raising in Public and Non- |
|  | Profit Organizations | 3 |

Subtotal: 7-9

## Public and Political Communication

BRCT Political Broadcasting 3
8316/BRCT
4310
SPCH 8110 Seminar in Modern Public Address 3
SPCH Rhetorical Theory and Criticism
8116/SPCH
4110
JOUR 8386 Film Theory \& Criticism 3
JOUR Mass Media Ethics 3
8406/JOUR
4400
JOUR Communications Law
8416/JOUR
4410
JOUR Theories of the First Amendment: 3
8426/JOUR Speech and Press
4420
JOUR Mass Communication and Public
8506/JOUR Opinion
4500

## Possible Electives:

PSCI Public Opinion and Polling
8126/PSCI
4120
PSCI Political Parties
8165/PSCI
3160
PSCI Constitutional Law: Foundations
8176/PSCI
4170

## Technical Communication

JOUR 8879 Technical Editing

| JOUR | Information Design for Technical | 3 |
| :--- | :--- | :--- |
| 8856/ENGL | Communicators |  |
| 4850/JOUR |  |  |
| 4850/ENGL |  | 3 |
| 8856 |  |  |
| JOUR | Technical Communication |  |
| 8836/JOUR |  | 3 |
| 4830/ENGL |  |  |
| 4830/ENGL |  | 3 |
| 8836 |  |  |
| JOUR 8816 | Digital Literacies for Technical |  |
|  | Communicators |  |
| Possible Electives: |  |  |
| JOUR | Capstone Course in Technical |  |
| 8896/ENGL | Communication |  |
| 4890/JOUR |  |  |
| 4890/ENGL |  | 3 |
| 8896 |  |  |
| SPCH | Computer-Mediated Communication | 3 |
| 8196/SPCH |  |  |
| 4190 |  |  |

TOTAL CREDIT HOURS:
Thesis Option: 30 hours Project Option: 36 hours

## Other Program-Related Information:

## Comprehensive Examinations

The exam will usually be taken following the completion of all course work. A student may, with the approval of his/her thesis or project committee advisor and GPC, take the comprehensive exam during the final semester after the core courses and area of specialization courses are successfully completed.

The comprehensive exam will be based upon the following three areas:

1. Communication Theory
2. Communication Research
3. Specialized study in communication

When the student is ready to begin the comprehensive exam process, the individual will prepare a curriculum vita, a master list of all courses taken in his/her program of study. This list should include titles of all papers written, projects conducted, key texts read, plus other relevant information that will provide graduate faculty members with an overall view of the student's graduate training.

Once the student has contacted and received confirmation from the three graduate faculty members who will write the comprehensive examination questions, the student should contact the Department secretary (402-554-2600) about possible dates to take the comprehensive exam. The student must file a Graduate Student Comprehensive Examination Form with the Department secretary and
provide copies to the faculty who have agreed to write questions.

The exams must be taken on two consecutive days. Two hours per exam will be allotted, and exams may not begin after 2:30 p.m. More information about the comprehensive examination process can be found in the School of Communication graduate handbook.
*** Redirect Link ***
*** Technical-Communication-Certificate ***
*** Redirect Link ***
*** Human-Resources-and-Training-Certificate ***
*** Redirect Link ***
*** Human-Resources-and-Training-Certificate-Concentrations ***

## Computer Science

## COMPUTER SCIENCE, M.S.

Dept. of Computer Science, College of Information Science \& Technology

## Vision Statement

The Master of Science in Computer Science allows students to develop better planning, management and technical abilities necessary for leading a thriving organization in today's complex digital world. At the Peter Kiewit Institute, students not only receive degrees, they graduate with industry experience, a pocket full of business contacts, and lifelong friends.

## Program Contact Information:

Dr. Haifeng Guo, Graduate Program Chair (GPC)
Peter Kiewit Institute (PKI) 282
402-554-2852
haifengguo@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu

## Program Website:

http://www.cs.unomaha.edu/graduate/index.html

## Application Deadlines:

- Fall: July 1
- Spring: November 1
- Summer: March 1


## If you are applying for department financial aid, the deadlines are as follows:

- Fall: February 1
- Spring: September 1
- Summer: N/A


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 for the written TOEFL
- 173 for the computer-based TOEFL
- 61 for the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Entrance Exam is required
- Applicants must have official results of the general Graduate Record Exam (GRE) sent to the university by ETS. For international applicants, official TOEFL results are also required. These scores must be valid during the time the application is being processed.
- Recommended GRE scores are at least 740 on the Quantitative portion and 400 on the Verbal portion (158 in the new quantitative reasoning section and 146 in the new verbal reasoning section, for tests taken after August 1, 2011)
- The GRE requirement is waived IF:
- The student is a graduate of the University of Nebraska system with a degree in Computer Science and a GPA of 3.5 or more; or
- The student has earned an MS or more advanced degree in a closely related discipline
- Minimum 550 on the written TOEFL; 213 for the computer-based; 79 for the internet-based; 6.5 on the IELTS
- For international applicants, official TOEFL results are also required. These scores must be valid during the time the application is being processed.
- 2 Letters of Recommendation
- Professional Resume


## UNDERGRADUATE DEFICIENCIES

The curriculum for the MS in Computer Science requires a basic knowledge of computer fundamentals including mathematics, programming, data structures, computer architecture and operating systems. Successful completion of these courses with a "B" or better ( 3.0 on a 4.0 scale) in each course is required to become an unconditionally admitted student.

## Programming:

| CIST 1400 | Introduction to Computer |
| :--- | :--- |
|  | Programming |
| CSCI 1620 | Introduction to Computer Science II |

## Data Structures and Foundation

CSCI 8010 Foundations of Computer Science
Computer Organization and Architecture
CSCI 3710 Introduction to Digital Design and Computer Organization
CSCI 4350 Computer Architecture
Operating Systems
CSCI 4500 Operating Systems
Programming Languages and Compilers
CSCI 4220 Principles of Programming Languages
CSCI 4830 Introduction Software Engineering

## MS IN COMPUTER SCIENCE DEGREE REQUIREMENTS

## MS-CSCI Required Courses (15 hours):

The five courses listed below provide overall breadth in the areas of languages, algorithms, architecture, operating systems, and software engineering.
Students selecting the coursework, thesis, or project option with no area of concentration must take all five required courses (note that some required courses are needed as prerequisites for certain areas of concentration).
CSCI 8000 Advanced Concepts in Programming Languages
CSCI Design and Analysis of Algorithms
8080/MATH
8080
CSCI 8150
Advanced Computer Architecture
CSCI
8530/CSCI
4510
CSCI 8700
Software Specification and Design
CSCI 8000, CSCI 8530, CSCI 8700: offered in the Fall
CSCI 8080, CSCI 8150: offered in the Spring

## MS-CSCI Electives

(9 hours, Thesis or Project option; 15 hours, Coursework option):

To complete the thesis or Project options, a student must complete any three additional graduate-level computer science courses. The coursework option requires completion of any five additional graduate-level courses in computer science.

## MS-CSCI Concentrations:

(9-15 hours depending on which option is selected coursework, project or thesis)

See Computer Science Concentrations (p. 39)

## MS-CSCI Exit Requirements:

## Thesis Option

CSCI 8990 Thesis 1 -

Project Option
CSCI 8960 Thesis Equivalent Project in Computer Science

## Coursework Option

CSCI 8910 Master of Science Capstone
The Capstone course should be taken only after students have completed at least $\mathbf{7 5 \%}$ of course requirements for the major. Core classes must be completed. Those who have not made sufficient progress toward degree completion are prohibited from enrolling.

## TOTAL CREDIT HOURS:

Thesis Option: 30 hours
Project Option: 30 hours
Coursework Option: 33 hours

## Other Program-Related Information:

The Department of Computer Science offers an Integrated Undergraduate-Graduate Program that is a 146-149 hour undergraduate-graduate program. It allows eligible students to work toward the master's degree in computer science while completing their undergraduate degree. For further information about this program please contact the Department of Computer Science at 402-554-2423.

## Graduate Assistantships

- Complete this form to apply for a graduate assistantship


## Advantage Scholarship for Non-Nebraska Residents

 ONLY:- Tuition scholarships for an amount up to the difference between resident and non-resident tuition; click here to apply
- Multiple awards available
- Application submission deadlines:
- Fall: April 15
- Spring: November 15
- Awarded to students who are not residents of Nebraska
- These awards are renewable
- Must maintain a cumulative GPA of 3.00 or better
- Submitting an application does not guarantee an award.
- If an application is submitted after a deadline, it will be added to a wait-list. If funds become available, the department will notify the applicant.

COMPUTER SCIENCE
CONCENTRATIONS

## ARTIFICIAL INTELLIGENCE

Students must take any 3 of the 5 Required Courses listed above (9 hours).

## Core Courses ( 9 hours):

| CSCI 8300 | Image Processing and Computer | 3 |
| :--- | :--- | ---: |
|  | Vision | 3 |
| CSCI | Introduction to Artificial |  |
| 8456/CSCI | Intelligence |  |
| 4450 |  | 3 |
| CSCI | Multi-agent Systems and Game | 3 |
| 8480/MATH | Theory |  |
| 8480 |  |  |
| CSCI 8300 (offered in the Fall semester in odd-numbered |  |  |
| years) |  |  |

CSCI 8456 (offered in the Fall)
CSCI 8480 (offered in the Spring)
Elective Courses ( 6 hours; choose any two):

| CSCI 8476 | Pattern Recognition | 3 |
| :--- | :--- | :--- |
| CSCI | Introduction to Multi-agent and | 3 |
| $8486 /$ CSCI | Multi-robot Systems |  |
| 4480 |  | 3 |
|  | Any graduate-level course in | 3 |
|  | Computer Science |  |

CSCI 8476 (offered in the Fall semester in even-numbered years)
CSCI 8486 (offered in the Fall in odd-numbered years)

## DATABASE AND KNOWLEDGE ENGINEERING

Students must take any 3 of the 5 Required Courses listed above ( 9 hours).
Core Courses (9 hours)
CSCI 8340 Data Base Management Systems II
CSCI 8340 (offered in the Fall in odd-numbered years)
Choose two from the following:
CSCI 8350 Data Warehousing and Data Mining 3
CSCI 8360 Information Storage and Retrieval
CSCI 8390 Advanced Topics in Data Base

Management Systems
CSCI 8350 (offered in the Spring in odd-numbered years)
CSCI 8360 (offered in the Fall in even-numbered years)
CSCI 8390 (offered in the Spring in even-numbered years)
Elective Courses (6 hours; choose any two):
CSCI Database Search and Pattern
8876/BIOI Discovery in Bioinformatics
4870
Any graduate-level course in Computer Science

CSCI 8876 (offered in the Spring)

## INFORMATION ASSURANCE

Students must take any 3 of the 5 Required Courses listed above (9 hours).
Core Courses ( 9 hours; choose any three):
CSCI 8410 Distributed System and Network 3 Security
CSCI 8430 Trusted System Design, Analysis 3
CSCI 8610 Fault Tolerant Distributed Systems 3
CSCI 8760 Formal Methods in Software 3
Engineering
CSCI 8410 (offered in the Spring in even-numbered years)
CSCI 8430 (offered in the Fall in even-numbered years)
CSCI 8610 (offered in the Spring in odd-numbered years)
CSCI 8760 (offered in the Spring in odd-numbered years)
Electives (6 hours; choose any two):
ISQA 8560 Information Warfare and Security 3
ISQA 8570 Information Security Policy and 3
Ethics
Any graduate-level course in 3 Computer Science
ISQA 8560 (offered in the Spring in odd-numbered years)
ISQA 8570 (offered in the Spring in even-numbered years)

## NETWORK TECHNOLOGIES

Students must take any 3 of the 5 Required Courses listed above (9 hours).
Core Courses ( 9 hours; choose any three):
CSCI 8210 Advanced Communication Networks 3
CSCI 8410 Distributed System and Network 3
CSCI 8610 Fault Tolerant Distributed Systems 3
CSCI 8620 Mobile Computing and Wireless 3 Networks

CSCI 8210 (offered in the Fall in odd-numbered years)
CSCI 8410 (offered in the Spring in even-numbered years)

CSCI 8610 (offered in the Spring in odd-numbered years)
CSCI 8620 (offered in the Fall in even-numbered years)
Electives (6 hours; choose any two):
CSCI 8156 Graph Theory \& Applications 3
Any graduate-level course in 3 Computer Science

CSCI 8156 (offered in the Spring)

## SOFTWARE ENGINEERING

## Students must take:

CSCI 8700 Software Specification and Design
Choose two from the remaining Required Courses listed above ( 9 hours total).
Core Courses ( 9 hours; choose any three):

| CSCI 8430 | Trusted System Design, Analysis <br> and Development | 3 |
| :--- | :--- | ---: |
| CSCI 8710 | Modern Software Development <br> Methodologies | 3 |
| CSCI 8760 | Formal Methods in Software <br> Engineering | 3 |
| CSCI 8790 | Advanced Topics in Software <br> Engineering | 3 |

CSCI 8430 (offered in the Fall in even-numbered years)
CSCI 8710 (offered in the Fall in odd-numbered years)
CSCI 8760 (offered in the Spring in odd-numbered years)
CSCI 8790 (offered in the Spring in even-numbered years)
Electives ( 6 hours; choose any two):
ISQA 8210 Management of Software
Development
Any graduate-level course in

ISQA 8210 (offered in the Fall and Spring)

## SYSTEMS

## Students must take:

| CSCI 8150 | Advanced Computer Architecture |
| :--- | :--- |
| CSCI | Advanced Operating Systems |
| 8530/CSCI |  |
| 4510 |  |

## Choose one from the remaining Required Courses

 listed above (9 hours total)Core Courses (9 hours):
CSCI 8170 VLSI Testing 3
CSCI Introduction to Parallel Computing
8446/CSCI
4440
CSCI 8610 Fault Tolerant Distributed Systems
CSCI 8170 (offered in the Spring in odd-numbered years)
CSCI 8446 (offered in the Fall)

CSCI 8610 (offered in the Spring in odd-numbered years)
Electives (6 hours; choose any two):
CSCI Computer Graphics
8626/CSCI
4620
Any graduate-level course in

CSCI 8626 (offered in the Spring)
ARTIFICIAL INTELLIGENCE
CERTIFICATE
Department of Computer Science, College of Information Science \& Technology

## Vision Statement

The objective of the certificate in artificial intelligence is to expose students to the principles and technologies used to embody machines with human-like intelligent capabilities and to enable the machines to assist humans in performing complex and hazardous tasks. Students completing this certificate program have an opportunity to learn as well as perform hands-on experiments in different areas of artificial intelligence, including automated software systems such as software agents, multi-agent and multirobot systems, machine vision and image processing technologies, neural network-based adaptive software systems, heuristics and stochastic optimization techniques for critical decision making, and machine learning and knowledge engineering techniques that embed intelligence in computers and information systems.

## Program Contact Information:

Dr. Haifeng Guo, Graduate Program Chair (GPC)
Peter Kiewit Institute (PKI) 282
402-554-2852
haifengguo@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu

## Program Website:

http://www.cs.unomaha.edu/graduate/index.html

## Application Deadlines:

- Fall: July 1
- Spring: November 1
- Summer: March 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Resume
- Submit a resume detailing your work experience and background (if applicable).


## CERT-ARTI DEGREE REQUIREMENTS

## Provisional Admission

Students who have not taken an undergraduate data structures course with a grade of "B" ( 3.0 on a 4.0 scale) or better must do so before they will be allowed to continue in the program.
CSCI 3320 Data Structures
or equivalent
Cert-ARTI-Required Course (3 hours):
CSCI Introduction to Artificial Intelligence
8456/CSCI
4450
Cert-ARTI-Electives (9 hours):
CSCI 8110 Advanced Topics in Artificial Intelligence
CSCI 8300 Image Processing and Computer Vision
CSCI 8476 Pattern Recognition
CSCI 9340 Computational Intelligence for Data Management
CSCI 9350 Mathematical and Logical Foundations of Data Mining
CSCI 9410 Advanced Topics in Logic Programming
CSCI 9420 Intelligent Agent Systems

## Cert-ARTI-Other Program-Related

 Information:
## Graduate Assistantships

- Complete this form to apply for a graduate assistantship.

Advantage Scholarship for Non-Nebraska Residents ONLY:

- Tuition scholarships for an amount up to the difference between resident and non-resident tuition; click here to apply
- Multiple awards available
- Application submission deadlines:
- Fall: April 15
- Spring: November 15
- Awarded to students who are not residents of Nebraska
- These awards are renewable
- Must maintain a cumulative GPA of 3.00 or better
- Submitting an application does not guarantee an award.
- If an application is submitted after a deadline, it will be added to a wait-list. If funds become available, the department will notify the applicant.


## COMMUNICATION NETWORKS CERTIFICATE

Department of Computer Science, College of Information Science \& Technology

## Vision Statement

The Communication Network Certificate Program is a career program designed to meet the growing industry demand for qualified, highly trained individuals in the field of computer network systems. It is designed to give the working professional both a conceptual view and an indepth understanding of the latest technologies. The program includes courses ranging from basic concepts such as Local Area Networks to advanced networking concepts such as mobile wireless communication systems and networks.

## Program Contact Information:

Dr. Haifeng Guo, Graduate Program Chair (GPC)
Peter Kiewit Institute (PKI) 282
402-554-2852
haifengguo@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu

## Program Website:

http://www.cs.unomaha.edu/graduate/index.html

## Application Deadlines:

- Fall: July 1
- Spring: November 1
- Summer: March 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Resume
- Submit a resume detailing your work experience and background (if applicable).


## CERT-CMNW DEGREE REQUIREMENTS

## Provisional Admission:

Students who have not taken an undergraduate data structures course or an introductory communication networks course with a grade of " B " ( 3.0 on a 4.0 scale) or better in each course must do so before they will be allowed to continue in the program.
CSCI 3320 Data Structures 3

CSCI 3550 Communications Networks
or equivalent
Cert-CMNW-Required Courses ( 6 hours):
CSCI 8210 Advanced Communication Networks 3
CSCI 8620 Mobile Computing and Wireless
Networks
NOTE: If a core course is waived, it must be replaced with another course from the electives listed below.
Cert-CMNW-Electives ( 6 hours):
Choose two courses from the following list:
CSCI 8156 Graph Theory \& Applications
CSCI 8200 Interconnection Networks
CSCI Telecommunications Management

8220/ISQA
8230
CSCI 8410

CSCI 8610

Distributed System and Network Security

Cert-CMNW-Other Program-Related Information:

## Graduate Assistantships

- Complete this form to apply for a graduate assistantship.


## Advantage Scholarship for Non-Nebraska Residents ONLY:

- Tuition scholarships for an amount up to the difference between resident and non-resident tuition; click here to apply
- Multiple awards available
- Application submission deadlines:
- Fall: April 15
- Spring: November 15
- Awarded to students who are not residents of Nebraska
- These awards are renewable
- Must maintain a cumulative GPA of 3.00 or better
- Submitting an application does not guarantee an award.
- If an application is submitted after a deadline, it will be added to a wait-list. If funds become available, the department will notify the applicant.
Total Credit Hours: 12


## SOFTWARE ENGINEERING CERTIFICATE

Department of Computer Science, College of Information Science \& Technology

## Vision Statement

Through our degree you'll develop better planning, management and technical abilities necessary for leading a thriving organization in today's complex, digital world. At the Peter Kiewit Institute, you may not only get the degree, but you can graduate with industry experience, a pocket full of business contacts and life-long friends.

## Program Contact Information:

Dr. Haifeng Guo, Graduate Program Chair (GPC) Peter Kiewit Institute (PKI) 282
402-554-2852
haifengguo@unomaha.edu

Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu
Program Website:
http://www.cs.unomaha.edu/graduate/index.html

## Application Deadlines:

- Fall: July 1
- Spring: November 1
- Summer: March 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Resume
- Submit a detailed resume highlighting your work experience and background (if applicable)


## CERT-SWEN DEGREE REQUIREMENTS

Prerequisite courses ( $\mathbf{3}$ hours):
CSCI 4830 Introduction Software Engineering
or equivalent
Cert-SWEN Required Courses ( 6 hours):
CSCI 8700 Software Specification and Design 3
CSCI 8710 Modern Software Development Methodologies
Cert-SWEN Elective Courses ( 6 hours-select two):
CSCI 8526 Human-Computer Interaction 3
CSCI 8266 User Interface Design and 3 Development
CSCI 8760 Formal Methods in Software Engineering
CSCI 8790 Advanced Topics in Software

## Engineering

## Cert-SWEN-Other Program-Related Information:

## Graduate Assistantships

- Complete this form to apply for a graduate assistantship.

Advantage Scholarship for Non-Nebraska Residents ONLY:

- Tuition scholarships for an amount up to the difference between resident and non-resident tuition; click here to apply
- Multiple awards available
- Application submission deadlines:
- Fall: April 15
- Spring: November 15
- Awarded to students who are not residents of Nebraska
- These awards are renewable
- Must maintain a cumulative GPA of 3.00 or better
- Submitting an application does not guarantee an award.
- If an application is submitted after a deadline, it will be added to a wait-list. If funds become available, the department will notify the applicant.
Total Credit Hours: 12


## SYSTEMS AND ARCHITECTURE CERTIFICATE

## Department of Computer Science, College of Information Science \& Technology

## Vision Statement

This certificate provides students with knowledge in the underlying architecture of computers. Students may choose either the hardware track or the software track. In the hardware track, students gain more in-depth knowledge of the field. Students in this track will develop skills to perform system and component design, quality assurance, and testing. In the software track, knowledge in the underlying architecture helps in generating and understanding optimized software. Students in this track will develop skills that will help them perform systems programming, language processing, and system administration.

## Program Contact Information:

Dr. Haifeng Guo, Graduate Program Chair (GPC) Peter Kiewit Institute (PKI) 282
402-554-2852
haifengguo@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu

## Program Website:

http://www.cs.unomaha.edu/graduate/index.html

## Application Deadlines:

- Fall: July 1
- Spring: November 1
- Summer: March 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Resume
- Submit a detailed resume highlighting your work experience and background (if applicable).


## CERT-SARC DEGREE REQUIREMENTS

## Prerequisite courses

Hardware Track ( 3 hours-select one):

| CSCI 3710 | Introduction to Digital Design and <br> Computer Organization |
| :--- | :--- |
| CSCI 4350 | Computer Architecture |

or equivalent
Software Track (6 hours):

| CSCI 4220 | Principles of Programming |
| :--- | :--- |
|  | Languages |
| CSCI 4500 | Operating Systems |

Cert-SARC Required Courses ( 6 hours):
CSCI 8150 Advanced Computer Architecture 3
CSCI Advanced Operating Systems 3
8530/CSCI
4510
Cert-SARC Elective Courses
Hardware Track (6 hours)
Select Two:
CSCI 8160 Introduction to VLSI Design 3
CSCI 8170 VLSI Testing 3
CSCI 8610 Fault Tolerant Distributed Systems 3
CSCI Computer Graphics 3
8626/CSCI
4620
Software Track (6 hours)
Select Two:
CSCI 8550 Advanced Operating System Theory 3
CSCI 8706 Compiler Construction 3
CSCI 8610 Fault Tolerant Distributed Systems 3

## Cert-SARC-Other Program-Related

 Information:
## Graduate Assistantships

- Complete this form to apply for a graduate assistantship.


## Advantage Scholarship for Non-Nebraska Residents

 ONLY:- Tuition scholarships for an amount up to the difference between resident and non-resident tuition; click here to apply
- Multiple awards available
- Application submission deadlines:
- Fall: April 15
- Spring: November 15
- Awarded to students who are not residents of Nebraska
- These awards are renewable
- Must maintain a cumulative GPA of 3.00 or better
- Submitting an application does not guarantee an award.
- If an application is submitted after a deadline, it will be added to a wait-list. If funds become available, the department will notify the applicant.


## Total Credit Hours: 12

## Counseling

COUNSELING, M.A.

## Counseling Department of Counseling, College of Education

## Vision Statement

The purpose of the Counseling Department is to prepare a diverse student population at the master's degree level for professional service as school counselors, clinical mental health counselors, student affairs professionals, and/or for advanced study. Graduates of the program are prepared to function professionally within their area(s) of concentration.

As dedicated practitioners, reflective scholars, and responsible citizens, our graduates are prepared to fill the need for highly trained professionals. Graduates are trained to support the broad range of counseling needs of the metropolitan community including individual, couples, and family and group counseling.

## Program Contact Information:

Dr. Paul Barnes, Graduate Program Chair (GPC) Roskens Hall 101
402-554-2306
pbarnes@unomaha.edu

## Program Website:

http://coe.unomaha.edu/couns/index.php

## Application Deadlines:

- Fall: March 1
- Spring: October 1
- Summer: March 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Graduate Record Exam (GRE) or Miller Analogy Test(MAT)
- May be waived if an advanced degree has been completed
- Three (3) Letters of Recommendation
- From persons who can speak for the candidate's professional competence and academic ability
- Applicants must have completed a minimum of 15 undergraduate or graduate hours in behavioral science, not including counseling courses.
- Completion of a personality inventory
- Group interview results
- Writing sample, if not completed as part of the GRE


## MA-COUN DEGREE REQUIREMENTS

## MA-COUN Concentrations

Students must select an area of concentration.
See Counseling, M.A. Concentrations (p. 46)
MA-COUN Exit Requirements:
COUN 8990 Thesis 1 -
Abnormal Psychology
8446/PSYC
4440
All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval and submission of a thesis.

Note: All graduate students must take an abnormal psychology course (3 hours), either at the graduate or the undergraduate level, prior to graduation. Check with the state where you are anticipating practice to note if the course needs to be graduate-level or if undergraduate is acceptable for credential/licensure requirements. This course does NOT count as part of the 48 -hour degree program requirement.

See Concentrations (p. 46) for complete degree totals.

## MA-COUN-Other Program-Related Information:

- Note: Earning a graduate degree in counseling does not satisfy all requirements placed on individuals who wish to practice counseling. Although the University may issue a degree in counseling, the graduate must satisfy
requirements of the appropriate credentialing body.
For example, the Licensed Mental Health Practitioner (LMHP) or School Counselor endorsement are issued after meeting the requirements of Nebraska's Department of Health and Human Services or the Nebraska Department of Education respectively.
- In Nebraska, the School Counseling endorsement requires a valid teaching certificate and a minimum of two years full-time successful teaching experience.
- Successful completion of an internship and the comprehensive exam are requirements for graduation. Graduates are recommended only for positions consistent with the concentration they completed.
- Candidates are admitted and permitted to continue programs in counseling on the basis of their potential for successful training and professional practice. Candidates are evaluated with respect to their suitability for continuation in the program prior to taking the Counseling Practicum or Internship courses. Specific course and grade requirements to take Practicum courses are available in the Counseling Department office.
- The K-12 School and Community concentrations are accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP), the national accrediting agency for Counselor Education programs.
- Ethical Conduct: It should be understood that academic performance is not the only criterion for continuation in the program or for graduation. Candidates are expected to maintain the highest standards of ethical conduct pertaining to academic course work, professional practice and research activity. Any breach in ethical conduct shall be subject to disciplinary action, regardless of the candidate's prior or current academic performance. See the "American Counseling Association Code of Ethics" for specific guidelines.


## COUNSELING, M.A.CONCENTRATIONS

## COMMUNITY COUNSELING

 CONCENTRATION (48 HOURS)(must have been admitted Fall 2012 or before)
Community Counseling Concentration Required Courses ( $\mathbf{3 9}$ hours):

| TED 8010 | Introduction to Research | 3 |
| :--- | :--- | :--- |
| COUN 8020 | Introduction to Counseling | 1 |
| COUN 8110 | Human Development and Psycho- | 3 |
|  | Social Intervention Strategies |  |
| COUN 8030 | Counseling Practices | 3 |
| COUN 8040 | Professional and Ethical Issues for | 3 |
|  | Professional Counselors |  |

COUN 8020 Introduction to Counseling 1
COUN 8110 Human Development and PsychoSocial Intervention Strategies
Counseling Practices Professional Counselors

| COUN 8200 | Counseling Theories | 3 |
| :--- | :--- | ---: |
| COUN 8226 | Career Development and Lifestyle | 3 |
| COUN 8230 | Appraisal Techniques in Counseling <br> and Guidance | 3 |
| COUN 8270 | Group Techniques in Guidance | 1 |
| COUN 8370 | Group Counseling: Theory and <br> Practice | 2 |
| COUN | Counseling Techniques I | 1 |
| 8306/COUN |  | 1 |
| 4300 | Counseling Techniques II |  |
| COUN |  | 1 |
| 8316/COUN |  | 3 |
| 4310 | Counseling Techniques III | 2 |
| 8406/COUN |  | 2 |
| 4400 | Counseling Multicultural and |  |
| COUN 8520 | Diverse Populations <br> COUN 8500 <br> Counseling and Consulting for | Special Concerns |
| COUN 8610 | Introduction to Marital and Family | 3 |
| COUN 8920 | Therapy <br> Treatment Planning and the DSM- | 3 |
|  | IV |  |

Note: COUN 8280 Crisis Intervention Strategies (3) can be taken in lieu of COUN 8306, COUN 8316 and COUN 8406
Community Counseling Clinical Experience Courses (9 hours):
COUN 8220 Counseling Practicum 3
COUN 8250 Internship I - Community 3
Counseling
COUN 8260 Internship II - Community Counseling
Subtotal: 54

## CLINICAL MENTAL HEALTH COUNSELING CONCENTRATION (60 HOURS)

(effective Spring 2013**)

## Required Courses ( 60 hours):

TED 8010 Introduction to Research 3

COUN 8020 Introduction to Counseling 1
COUN 8110 Human Development and Psycho- 3
Social Intervention Strategies
COUN 8030 Counseling Practices
COUN 8040 Professional and Ethical Issues for 3
Professional Counselors
COUN 8200 Counseling Theories 3
COUN 8226 Career Development and Lifestyle 3
COUN 8230 Appraisal Techniques in Counseling 3 and Guidance
COUN 8270 Group Techniques in Guidance 1
COUN 8370 Group Counseling: Theory and 2 Practice


Subtotal: 66
**The Clinical Mental Health Counseling Program at the University of Nebraska at Omaha is currently accredited under the CACREP 2001 standards as a Community Counseling program through March 31, 2016. The CACREP 2009 standards combine the Community Counseling and Mental Health Counseling standards into standards for Clinical Mental Health Counseling programs. The UNO Counseling Department will apply to continue accreditation for this program as a Clinical Mental Health Counseling program when it comes up for re-accreditation

## K-12 COUNSELING CONCENTRATION (48 HOURS)



Note: COUN 8280 Crisis Intervention Strategies can be taken in lieu of COUN 8306, COUN 8316 and COUN 8406
Subtotal: 54

## STUDENT AFFAIRS PRACTICE IN HIGHER EDUCATION-PROFESSIONAL PRACTICES CONCENTRATION (48 HOURS)

(must have been admitted Fall 2012 or earlier)
Required Student Affairs Practice in Higher Education-Professional Practices (48 hours):
TED 8010 Introduction to Research 3
COUN 8020 Introduction to Counseling 1
COUN 8030 Counseling Practices 3

| COUN 8040 | Professional and Ethical Issues for Professional Counselors |
| :---: | :---: |
| COUN 8100 | Research Project in Counseling and Guidance |
| COUN 8110 | Human Development and PsychoSocial Intervention Strategies |
| COUN 8150 | The Student and Student Personnel Work in Higher Education |
| COUN 8200 | Counseling Theories |
| COUN 8226 | Career Development and Lifestyle |
| COUN 8230 | Appraisal Techniques in Counseling and Guidance |
| COUN 8270 | Group Techniques in Guidance |
| COUN | Counseling Techniques I |
| $\begin{aligned} & \text { 8306/COUN } \\ & 4300 \end{aligned}$ |  |
| COUN | Counseling Techniques II |
| 8316/COUN |  |
| 4310 |  |
| COUN 8370 | Group Counseling: Theory and Practice |
| COUN | Counseling Techniques III |
| 8406/COUN |  |
| 4400 |  |
| COUN 8450 | College Student Personnel |
|  | Internship |
| COUN 8520 | Counseling Multicultural and Diverse Populations |

Note: COUN 8280 Crisis Intervention Strategies can be taken in lieu of COUN 8306, COUN 8316 and COUN 8406

## Selected Cognate Courses (6):

These courses are selected in consultation with the student's particular background and interests; i.e., admissions and registration, career counseling, placement and financial aid, student services (counseling, testing, students with special needs, etc.), housing and student union activities.
Subtotal: 54

## STUDENT AFFAIRS PRACTICE IN HIGHER EDUCATION-COLLEGE COUNSELING CONCENTRATION (51 HOURS)

(must have been admitted fall 2012 or earlier)
Required Courses ( $\mathbf{5 1}$ hours):

| TED 8010 | Introduction to Research | 3 |
| :--- | :--- | ---: |
| COUN 8020 | Introduction to Counseling | 1 |
| COUN 8030 | Counseling Practices | 3 |
| COUN 8040 | Professional and Ethical Issues for | 3 |
|  | Professional Counselors |  |
| COUN 8100 | Research Project in Counseling and | $1-$ |
|  | Guidance | 3 |
| COUN 8110 | Human Development and Psycho- | 3 |


| COUN 8150 | Social Intervention Strategies |  |
| :---: | :---: | :---: |
|  | The Student and Student Personnel Work in Higher Education | 3 |
| COUN 8200 | Counseling Theories | 3 |
| COUN 8220 | Counseling Practicum | 3 |
| COUN 8226 | Career Development and Lifestyle | 3 |
| COUN 8230 | Appraisal Techniques in Counseling and Guidance | 3 |
| COUN 8250 | Internship I - Community Counseling | 3 |
| COUN 8270 | Group Techniques in Guidance | 1 |
| COUN | Counseling Techniques I | 1 |
| 8306/COUN |  |  |
| COUN | Counseling Techniques II | 1 |
| 8316/COUN |  |  |
| 4310 |  |  |
| COUN 8370 | Group Counseling: Theory and Practice | 2 |
| COUN | Counseling Techniques III | 1 |
| 8406/COUN |  |  |
| 4400 |  |  |
| COUN 8450 | College Student Personnel |  |
|  | Internship | 6 |
| COUN 8520 | Counseling Multicultural and Diverse Populations | 3 |
| Note: COUN 8280 Crisis Intervention Strategies can be taken in lieu of COUN 8306, COUN 8316 and COUN 8406 |  |  |
| Selected Cognate Courses (6) |  |  |
| This concentration requires students to take: |  |  |
| COUN 8920 | Treatment Planning and the DSM-IV | 3 |
| COUN 8610 | Introduction to Marital and Family Therapy | 3 |
| to meet prerequisite requirements for Beginning |  |  |
| Practicum: |  |  |
| COUN 8220 | Counseling Practicum | 3 |
| Subtotal: 57 |  |  |
| STUDENT AFFAIRS PRACTICE IN HIGHER EDUCATION CONCENTRATION (36 HOURS) |  |  |
| (effective Spring 2013) |  |  |
| Required Courses (36 hours): |  |  |
| TED 8010 | Introduction to Research | 3 |
| COUN 8020 | Introduction to Counseling | 1 |
| COUN 8030 | Counseling Practices | 3 |
| COUN 8040 | Professional and Ethical Issues for Professional Counselors | 3 |
| COUN 8200 | Counseling Theories | 3 |
| COUN 8110 | Human Development and PsychoSocial Intervention Strategies | 3 |
| COUN 8150 | The Student and Student Personnel | 3 |
|  | Work in Higher Education |  |


| COUN 8226 | Career Development and Lifestyle |
| :--- | :--- |
| COUN 8270 | Group Techniques in Guidance |
| COUN 8370 | Group Counseling: Theory and |
| Practice |  |

Subtotal: 42

## GERONTOLOGY CONCENTRATION (45 HOURS)

| Required Courses (28 hours): |  |
| :---: | :---: |
| TED 8010 | Introduction to Research |
| COUN 8020 | Introduction to Counseling |
| COUN 8030 | Counseling Practices |
| COUN 8040 | Professional and Ethical Issues for Professional Counselors |
| COUN 8200 | Counseling Theories |
| COUN 8226 | Career Development and Lifestyle |
| COUN 8230 | Appraisal Techniques in Counseling and Guidance |
| COUN 8270 | Group Techniques in Guidance |
| COUN | Counseling Techniques I |
| 8306/COUN |  |
| COUN | Counseling Techniques II |
| 8316/COUN |  |
| 4310 |  |
| COUN 8370 | Group Counseling: Theory and |
|  | Practice |
| COUN | Counseling Techniques III |
| 8406/COUN |  |
| 4400 |  |
| COUN 8520 | Counseling Multicultural and |
|  | Diverse Populations |

Note: COUN 8280 Crisis Intervention Strategies can be taken in lieu of COUN 8306, COUN 8316 and COUN 8406

## Gerontology Concentration Additional Courses (0-3 hours):

These courses in counseling are selected only after recommendation from the adviser on the basis of the candidate's background and interests.
Gerontology (9-15 hours):
Fifteen graduate hours in gerontology are required except in some instances where a candidate has had undergraduate
hours in gerontology. These courses are selected with the major adviser's assistance and in collaboration with the gerontology program.
Practicum and Internship (9 hours):
Practicum and Internship are arranged in cooperation with the gerontology program to meet both the counseling department and the gerontology program requirements for practica and field experience.
Subtotal: 51

## COUNSELING, M.S.

## Department of Counseling, College of Education

Vision Statement
The purpose of the Counseling Department is to prepare a diverse student population at the master's degree level for professional service as school counselors, clinical mental health counselors, student affairs professionals, and/or for advanced study. Graduates of the program are prepared to function professionally within their area(s) of concentration.

As dedicated practitioners, reflective scholars, and responsible citizens, our graduates are prepared to fill the need for highly trained professionals. Graduates are trained to support the broad range of counseling needs of the metropolitan community including: individual, couples, family and group counseling.

## Program Contact Information:

Dr. Paul Barnes, Graduate Program Chair (GPC)
Roskens Hall 101
402-554-2306
pbarnes@unomaha.edu
Program Website:
http://coe.unomaha.edu/couns/index.php

## Application Deadlines:

- Fall: March 1
- Spring: October 1
- Summer: March 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Graduate Record Exam (GRE) or Miller Analogy Test(MAT)
- May be waived if an advanced degree has been completed
- Three (3) Letters of Recommendation
- From persons who can speak for the candidate's professional competence and academic ability
- Applicants must have completed a minimum of 15 undergraduate or graduate hours in behavioral science, not including counseling courses.
- Completion of a personality inventory
- Group interview results
- Writing sample, if not completed as part of the GRE


## MS-COUN DEGREE REQUIREMENTS

## MS-COUN Concentrations:

Student must select an area of concentration.
See Counseling, M.S. Concentrations (p. 50).

## MS-COUN Exit Requirements:

Comprehensive Examination
PSYC Abnormal Psychology

## 8446/PSYC

4440
Note: All graduate students must take an abnormal psychology course ( 3 hours), either at the graduate or undergraduate level, prior to graduation. Check with the state where you are anticipating practice to note if the course needs to be a graduate level course, or if undergraduate is acceptable for credential/licensure requirements. This course does NOT count as part of the 48 hour degree program requirement.

See Concentrations (p. 50) for complete degree totals.

## MS-COUN-Other Program-Related Information:

- Note: Earning a graduate degree in counseling does not satisfy all requirements placed on individuals who wish to practice counseling. Although the University may issue a degree in Counseling, the graduate must satisfy requirements of the appropriate credentialing
body. For example, the Licensed Mental Health Practitioner (LMHP) or School Counselor endorsement are issued after meeting requirements of Nebraska's Department of Health and Human Services or the Nebraska Department of Education respectively.
- In Nebraska, the School Counseling endorsement requires a valid teaching certificate and a minimum of two years full-time successful teaching experience.
- Successful completion of an internship and the comprehensive exam are requirements for graduation. Graduates are recommended only for positions consistent with the concentration they completed.
- Candidates are admitted and permitted to continue programs in counseling on the basis of their potential for successful training and professional practice. Candidates are evaluated with respect to their suitability for continuation in the program prior to taking the Counseling Practicum or Internship courses. Specific course and grade requirements to take Practicum courses are available in the Counseling Department office.
- The K-12 School and Community concentrations are accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP), the national accrediting agency for Counselor Education programs.
- Ethical Conduct : It should be understood that academic performance is not the only criterion for continuation in the program or for graduation. Candidates are expected to maintain the highest standards of ethical conduct pertaining to academic course work, professional practice and research activity. Any breach in ethical conduct shall be subject to disciplinary action, regardless of the candidate's prior or current academic performance. See the "American Counseling Association Code of Ethics" for specific guidelines.

COUNSELING, M.S. CONCENTRATIONS
COMMUNITY COUNSELING CONCENTRATION (48 HOURS)
(must have been admitted fall 2012 or earlier)
Community Counseling Required Courses (39 hours):
TED 8010 Introduction to Research 3
COUN 8020 Introduction to Counseling 1
COUN 8110 Human Development and Psycho- 3
Social Intervention Strategies
COUN 8030 Counseling Practices 3
COUN 8040 Professional and Ethical Issues for 3 Professional Counselors
COUN 8200 Counseling Theories
COUN 8226 Career Development and Lifestyle 3


| 4300 |  |  |
| :---: | :---: | :---: |
| COUN | Counseling Techniques II | 1 |
| 8316/COUN |  |  |
| 4310 |  |  |
| COUN | Counseling Techniques III |  |
| 8406/COUN |  |  |
| 4400 |  |  |
| COUN 8520 | Counseling Multicultural and | 3 |
|  | Diverse Populations |  |
| COUN 8500 | Counseling and Consulting for | 2 |
|  | Special Concerns |  |
| COUN 8610 | Introduction to Marital and Family | 3 |
|  | Therapy |  |
| COUN 8920 | Treatment Planning and the DSM- | 3 |
|  | IV |  |
| COUN 8280 | Crisis Intervention Strategies \& | 3 |
|  | Techniques |  |
| COUN | Treatment Issues in Chemical | 3 |
| 8516/SOWK Dependency |  |  |
| 4510/COUN |  |  |
| 4510/SOWK |  |  |
| 8516 |  |  |
| COUN | Medical and Psychosocial Aspects | 3 |
| 8686/SOWK of Alcohol/Drug Use and Addiction |  |  |
| 8686/SOWK |  |  |
| 4680/COUN |  |  |
| 4680 |  |  |
| COUN | Assessment and Case Management | 3 |
| 8696/SOWK in Substance Abuse |  |  |
| 8696/SOWK |  |  |
| 4690/COUN |  |  |
| 4690 |  |  |
| COUN 8220 | Counseling Practicum | 3 |
| COUN 8250 | Internship I - Community | 3 |
|  | Counseling |  |
| COUN 8260 | Internship II - Community | 3 |
|  | Counseling |  |
| **The Clinical Mental Health Counseling Program at the |  |  |
| University of Nebraska at Omaha is currently accredited under the CACREP 2001 standards as a Community |  |  |
| Counseling program through March 31, 2016. The |  |  |
| CACREP 2009 standards combine the Community |  |  |
| Counseling and Mental Health Counseling standards into standards for Clinical Mental Health Counseling programs. |  |  |
| The UNO Counseling Department will apply to continue accreditation for this program as a Clinical Mental Health |  |  |
| Counseling program when it comes up for re- accreditation in 2016, per CACREP guidelines. |  |  |
| Subtotal: 60 |  |  |
| K-12 COUNSELING CONCENTRATION (48 HOURS) |  |  |
| Required K-12 Counseling Concentration (48 hours): |  |  |
| TED 8010 | Introduction to Research |  |
| COUN 8030 | Counseling Practices | 3 |


| COUN 8040 | Professional and Ethical Issues for <br> Professional Counselors | 3 |
| :--- | :--- | ---: |
| COUN 8050 | Introduction to Professional School | 1 |
| Counseling |  |  |$\quad 3$

Note: COUN 8280 Crisis Intervention Strategies can be taken in lieu of COUN 8306, COUN 8316 and COUN 8406
Subtotal: 48

## STUDENT AFFAIRS PRACTICE IN HIGHER EDUCATION-PROFESSIONAL PRACTICES CONCENTRATION (48 HOURS)

(must have been admitted Fall 2012 or earlier)

## Required Courses (48 hours):

TED 8010 Introduction to Research 3

COUN 8020 Introduction to Counseling 1
COUN 8030 Counseling Practices 3
COUN 8040 Professional and Ethical Issues for 3
Professional Counselors
COUN 8100 Research Project in Counseling and 1 -
Guidance 3

COUN 8110 Human Development and Psycho- 3
Social Intervention Strategies
COUN 8150 The Student and Student Personnel


|  | Work in Higher Education |  |
| :--- | :--- | ---: |
| COUN 8200 | Counseling Theories | 3 |
| COUN 8226 | Career Development and Lifestyle | 3 |
| COUN 8230 | Appraisal Techniques in Counseling <br> and Guidance | 3 |
| COUN 8270 | Group Techniques in Guidance | 1 |
| COUN | Counseling Techniques I | 1 |
| 8306/COUN |  |  |
| 4300 |  | 1 |
| COUN | Counseling Techniques II |  |
| 8316/COUN |  | 2 |
| 4310 |  | 1 |
| COUN 8370 | Group Counseling: Theory and |  |
| COUN | Practice |  |
| 8406/COUN |  | 1 - |
| 4400 |  | 6 |
| COUN 8450 | College Student Personnel | 3 |
| COUN 8520 | Internship | Counseling Multicultural and |

Note: COUN 8280 Crisis Intervention Strategies can be taken in lieu of COUN 8306, COUN 8316 and COUN 8406

Selected Cognate Courses (6):
These courses are selected in consultation with the student's particular background and interests; i.e., admissions and registration, career counseling, placement and financial aid, student services (counseling, testing, students with special needs, etc.), housing and student union activities.
Subtotal: 48

## STUDENT AFFAIRS PRACTICE IN HIGHER EDUCATION-COLLEGE COUNSELING CONCENTRATION (51 HOURS)

(must have been admitted fall 2012 or earlier)
Required Courses ( 51 hours):
TED 8010 Introduction to Research 3
COUN 8020 Introduction to Counseling 1
COUN 8030 Counseling Practices 3
COUN 8040 Professional and Ethical Issues for 3
Professional Counselors
COUN 8100 Research Project in Counseling and 1 Guidance 3
COUN 8110 Human Development and Psycho- 3
Social Intervention Strategies
COUN 8150 The Student and Student Personnel 3 Work in Higher Education
COUN 8200 Counseling Theories 3
COUN 8220 Counseling Practicum 3
COUN 8226 Career Development and Lifestyle 3
COUN 8230 Appraisal Techniques in Counseling 3

| COUN 8250 | and Guidance <br> Internship I - Community <br> Counseling <br> Group Techniques in Guidance <br> COUN 8270 |
| :--- | :--- |
| COUN | Counseling Techniques I |
| 8306/COUN |  |
| 4300 |  |
| COUN | Counseling Techniques II |
| 8316/COUN |  |
| 4310 |  |
| COUN 8370 | Group Counseling: Theory and |
| COUN | Practice <br> Counseling Techniques III |
| 8406/COUN |  |
| COUN 8450 | College Student Personnel |
| COUN 8520 | Internship |
| Counseling Multicultural and |  |
| Diverse Populations |  |

Note: COUN 8280 Crisis Intervention Strategies can be taken in lieu of COUN 8306, COUN 8316 and COUN 8406

## Selected Cognate Courses (6)

This concentration requires students to take:
COUN 8920 Treatment Planning and the DSM-IV 3
COUN 8610 Introduction to Marital and Family Therapy
to meet prerequisite requirements for Beginning

## Practicum:

COUN 8220 Counseling Practicum
Subtotal: 51

## STUDENT AFFAIRS PRACTICE IN HIGHER EDUCATION CONCENTRATION (36 HOURS)

(effective Spring 2013)

| Required Courses (36 hours): |  |  |
| :--- | :--- | :--- |
| TED 8010 | Introduction to Research | 3 |
| COUN 8020 | Introduction to Counseling | 1 |
| COUN 8030 | Counseling Practices | 3 |
| COUN 8040 | Professional and Ethical Issues for <br>  <br> Professional Counselors | 3 |
| COUN 8200 | Counseling Theories | 3 |
| COUN 8110 | Human Development and Psycho- | 3 |
| COUN 8150 | Social Intervention Strategies <br> The Student and Student Personnel | 3 |
|  | Work in Higher Education |  |
| COUN 8226 | Career Development and Lifestyle | 3 |
| COUN 8270 | Group Techniques in Guidance | 1 |
| COUN 8370 | Group Counseling: Theory and | 2 |
| COUN | Practice |  |
| Counseling Techniques I | 1 |  |
| 4306/COUN |  |  |


| COUN | Counseling Techniques II | 1 |
| :--- | :--- | ---: |
| 8316/COUN |  |  |
| 4310 |  | 6 |
| COUN 8450 | College Student Personnel | 6 |
|  | Internship |  |
| COUN 8520 | Counseling Multicultural and |  |
|  | Diverse Populations |  |
| Subtotal: 36 |  |  |
| GERONTOLOGY CONCENTRATION (45 |  |  |
| HOURS) |  |  |


| Required Courses (28 hours): |  |  |
| :---: | :---: | :---: |
| TED 8010 | Introduction to Research | 3 |
| COUN 8020 | Introduction to Counseling | 1 |
| COUN 8030 | Counseling Practices | 3 |
| COUN 8040 | Professional and Ethical Issues for Professional Counselors | 3 |
| COUN 8200 | Counseling Theories | 3 |
| COUN 8226 | Career Development and Lifestyle | 3 |
| COUN 8230 | Appraisal Techniques in Counseling and Guidance | 3 |
| COUN 8270 | Group Techniques in Guidance | 1 |
| COUN | Counseling Techniques I | 1 |
| $\begin{aligned} & \text { 8306/COUN } \\ & 4300 \end{aligned}$ |  |  |
| COUN | Counseling Techniques II | 1 |
| 8316/COUN |  |  |
| 4310 |  |  |
| COUN 8370 | Group Counseling: Theory and | 2 |
|  | Practice |  |
| COUN | Counseling Techniques III | 1 |
| 8406/COUN |  |  |
| 4400 |  |  |
| COUN 8520 | Counseling Multicultural and | 3 |
|  | Diverse Populations |  |

Note: COUN 8280 Crisis Intervention Strategies can be taken in lieu of COUN 8306, COUN 8316 and COUN 8406

## Gerontology Concentration Additional Courses (0-3 hours):

These courses in counseling are selected only after recommendation from the adviser on the basis of the candidate's background and interests.

## Gerontology (9-15 hours):

Fifteen (15) graduate hours in gerontology are required except in some instances where a candidate has had undergraduate hours in gerontology. These courses are selected with the major adviser's assistance and in collaboration with the gerontology program.
Practicum and Internship (9 hours):
Practicum and Internship are arranged in cooperation with the gerontology program to meet both the counseling
department and the gerontology program requirements for practica and field experience.
Subtotal: 45

## Criminology and Criminal Justice

CRIMINOLOGY AND CRIMINAL JUSTICE, M.A.

School of Criminology \& Criminal Justice, College of Public Affairs \& Community Service

## Vision Statement

The Master of Arts (MA) degree is a 30 -hour non-terminal degree designed to emphasize research activity and independent inquiry. This degree is recommended for those students seeking an interim degree prior to pursuing a doctoral degree. To complete the MA degree, students must write and orally defend a thesis. The thesis is an independent research project and an academic exercise that is written to the standards of the faculty members on the thesis committee. A thesis requires a committee of three faculty members and typically takes two semesters to complete.

## Program Contact Information:

Dr. Lisa Sample
College of Public Affairs \& Community Service (CB) 218
402-554-3127
lsample@unomaha.edu

## Program Website:

http://www.unomaha.edu/criminaljustice/macj.php

## Application Deadlines:

- Fall: July 30
- Spring: December 1
- Summer: April 30


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International Applicants:
- International students seeking admission to the graduate program must meet UNO Graduate Studies requirements governing the admission of international students. In addition, all English as Second Language (ESL) students are required to submit scores from the IELTS, the PTE, or the internet-based TOEFL (the paper version of the TOEFL will NOT be accepted). Minimum required scores are as follows:
- IELTS: 7.5 required; $8.0+$ preferred
- PTE: score of 76 or higher
- Internet-based TOEFL: minimum of 21 in each of the 4 areas, and a minimum of 95 overall
- All ESL students are required to take a proficiency assessment examination at UNO upon admission, which will be used to determine whether further assistance is required.
- Entrance Exam
- Graduate Record Exam (GRE): a score of 300 or higher is required for admission to the MA program, or to be considered for an assistantship
- Two (2) Letters of Recommendation
- Statement of Purpose
- Two (2) pages discussing reasons for pursuing a graduate degree, interests in the field, and career goals for the future
- Unconditional Admission:
- Possession of a bachelor's degree from a regionally accredited institution
- Student has a 3.00 GPA (average of "B") overall in undergraduate work
- At least 12 credit hours of criminal justice courses or related courses that meet the requirements of the current School undergraduate curriculum, including a basic statistics course, a research methods course, an introductory criminal justice course, and a criminology course.
- Provisional Admission:
- Student has not completed all of the undergraduate prerequisite course requirements for unconditional admission to graduate study
- Student has no less than a 2.75 overall GPA for the last two years of undergraduate work and not less than a 2.75 GPA in the undergraduate major

| MA-CRCJ DEGREE REQUIREMENTS |  |  |
| :--- | :--- | :--- |
| MA-CRCJ Required Courses (12 hours): |  |  |
| CRCJ 8020 Seminar in Administration of Justice | 3 |  |
| CRCJ 8030 | Criminal Justice Research Theory | 3 |
| and Methodology |  |  |
| CRCJ 8950 | Statistical Applications in Criminal <br> Justice \& Public Admin | 3 |
| CRCJ 9020 | Seminar on Theories of Crime | 3 |

MA-CRCJ Electives ( 12 hours):
Students select four (4) of the following courses with
advisor approval
CRCJ $8040 \quad$ Seminar in Police and Society
CRCJ 8050 Seminar in Corrections 3

CRCJ 8060 Seminar in the Criminal Court 3
CRCJ 8080 Seminar in Juvenile Justice 3
CRCJ 8130 Seminar in Women and Criminal 3
CRCJ 8210 Program Evaluation and Policy 3
CRCJ 8180 Criminal Justice Internship 3
CRCJ 8190 Independent Study 1 -
CRCJ 9150 Special Topics in Criminology and 3 Criminal Justice
CRCJ 9160 Seminar in Community-Based 3
Corrections
CRCJ 9170 Seminar on Institutional Corrections 3
CRCJ 9200 Seminar on Violent Crime and 3
CRCJ 9220 Advanced Criminological Theory
and Theory Construction
MA-CRCJ Exit Requirements (6 hours): CRCJ 8990 Masters Thesis

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms, and final approval/submission of the thesis.
Total Credit Hours: 30
CRIMINOLOGY AND CRIMINAL JUSTICE, M.S.

School of Criminology \& Criminal Justice, College of Public Affairs \& Community Service
Vision Statement

The Master of Science (MS) degree is a terminal nonthesis degree designed to meet the needs of professional practitioners in the field of criminal justice. To complete the MS degree, students must complete a comprehensive exam or the Capstone course, in which students will conduct an independent research project and write a report similar to those written in agencies and Criminal Justice.

## Program Contact Information:

Dr. Lisa Sample
College of Public Affairs \& Community Service (CB) 218
402-554-3127
1sample@unomaha.edu

## Program Website:

http://www.unomaha.edu/criminaljustice/macj.php

## Application Deadlines:

- Fall: July 30
- Spring: December 1
- Summer: April 30


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International Applicants:
- International students seeking admission to the graduate program must meet UNO Graduate Studies requirements governing the admission of international students. In addition, all English as Second Language (ESL) students are required to submit scores from the IELTS, the PTE, or the internet-based TOEFL (the paper version of the TOEFL will NOT be accepted). Minimum required scores are as follows:
- IELTS: 7.5 required; $8.0+$ preferred
- PTE: score of 76 or higher
- Internet-based TOEFL: minimum of 21 in each of the 4 areas, and a minimum of 95 overall
- All ESL students are required to take a proficiency assessment examination at UNO upon admission, which will be used to determine if further assistance is required
- Two (2) Letters of Recommendation
- Statement of Purpose
- Two (2) pages discussing reasons for pursuing a graduate degree, interests in the field, and career goals for the future
- Unconditional Admission:
- Possession of a bachelor's degree from a regionally accredited institution
- Student has at least a 3.00 GPA (average of "B") overall in the undergraduate work
- At least 12 credit hours of criminal just courses or related courses that meet the requirements of the current School undergraduate curriculum, including a basic statistics course, a research methods course, an introductory criminal justice course, and a criminology course.
- Provisional Admission:
- Student must have a bachelor's degree from a regionally accredited institution (if the institution is non-accredited, 12 credit hours of graduate course work at UNO must be successfully completed before the student is eligible for unconditional admission)
- Student has not completed all of the undergraduate prerequisite course requirements for unconditional admission to graduate study
- Student has no less than a 2.75 overall GPA for the last two years of undergraduate work and not less than a 2.75 GPA in the undergraduate major.


## MS-CRCJ DEGREE REQUIREMENTS

## MS-CRCJ Required Courses (12 hours):

The following core courses must be taken within the first 18 hours of graduate coursework:
CRCJ 8010 Nature of Crime 3
CRCJ 8020 Seminar in Administration of Justice 3
CRCJ 8030 Criminal Justice Research Theory 3
and Methodology
CRCJ 8950 Statistical Applications in Criminal Justice \& Public Admin

## MS-CRCJ Electives (12 hours):

Students select four of the following courses with advisor approval:
CRCJ 8040 Seminar in Police and Society 3
CRCJ 8050 Seminar in Corrections 3
CRCJ 8060 Seminar in the Criminal Court 3
System
CRCJ 8070 Seminar in Criminal Law and 3
Procedure
CRCJ 8080 Seminar in Juvenile Justice 3
CRCJ 8090 Seminar in Theoretical Criminology 3
CRCJ 8100 Criminal Justice Organization, 3
Administration and Management
CRCJ 8110 Criminal Justice Planning and 3
Change
CRCJ 8130 Seminar in Women and Criminal 3
CRCJ 8180 Criminal Justice Internship 3
CRCJ 8190 Independent Study 1 -
CRCJ 8200 Special Problems in Criminal Justice 3
CRCJ 9000 Theory II and Theory Construction 3
CRCJ 9010 Seminar on Law and Social Control 3
CRCJ 9030 Seminar on Minorities and the 3
$\begin{array}{ll} & \text { Criminal Justice System } \\ \text { CRCJ } 9040 & \text { Comparative Criminology and }\end{array}$
Criminal Justice Systems
CRCJ 9090 Special Problems in Research 3
CRCJ 9110 $\begin{array}{ll}\text { Meminar on Police Organization and } & \end{array}$
CRCJ 9120 Seminar on Police Effectiveness 3
CRCJ 9130 Advanced Research on Policing 3
CRCJ 9150 Special Topics in Criminology and 3
CRCJ 9160 $\begin{array}{ll}\text { Criminal Justice } \\ \text { Seminar in Community-Based }\end{array}$
CRCJ 9170 Seminar on Institutional Corrections 3
CRCJ 9180 Seminar on the Criminal Court 3
System
CRCJ 9200 Seminar on Violent Crime and 3
CRCJ 9980 Directed Readings in Criminology 1 -
and Criminal Justice 6
CRCJ 9090: (either quantitative or qualitative)
MS-CRCJ Cognate Electives (9 hours):
Any course from any field at the 8000 level or higher, including but not limited to 8000 - or 9000 -level courses in Business, Sociology, Psychology, Political Science, Social Work, Public Administration, Gerontology, etc.

## MS-CRCJ Specializations:

See Criminology and Criminal Justice Specializations (p. 57)

## MS-CRCJ Exit Requirements:

CRCJ $8970 \begin{aligned} & \text { Capstone Project in Criminology and } \\ & \text { Criminal Justice }\end{aligned}$
Students can elect to take the capstone course. This course is counted as 3 credit hours of the 12 elective hours and is ONLY OFFERED IN SPRING SEMESTERS.

As an alternative to the Capstone course, students can choose to take a comprehensive exam.
The exam should be taken in the students' last semester of coursework. Comprehensive Exams are scheduled for the second Friday of September for the fall semester and the last Friday of January for the spring semester.

## MS-CRCJ-Other Program-Related Information:

NOTE: The MS degree in Criminology \& Criminal Justice can be obtained online. All courses required for the MS degree will be offered online in a two-year rotation. Elective courses in Criminology are also offered in spring, summer and fall semesters.
Total Credit Hours: 36
CRIMINOLOGY AND CRIMINAL JUSTICE SPECIALIZATIONS

Students may choose to pursue one of the two following specializations for their cognate elective hours:
PUBLIC ADMINISTRATION (9 HOURSSELECT THREE):

| One of the following: |  |
| :---: | :---: |
| PA 8050 | Public Administration and |
|  | Democracy |
| PA 8440 | Organization Develop. \& Planned |
| One of the following: |  |
| PA 8400 | Public Budgeting |
| PA | Seminar in Public Financial |
| 8480/AVN | Administration |
| 8480 |  |
| One of the following: |  |
| PA 8410 | Public Human Resource |
|  | Management |
| PA 8420 | Public Works Management |
| Course Option |  |
| PA 8460 | Seminar in Public Personnel Administration |

NOTE: Students should check the Public Administration website for schedule of courses.

## COUNSELING (9 HOURS):

| Required courses (6 hours-select two): |  |  |
| :--- | :--- | :--- |
| COUN 8020 | Introduction to Counseling | 1 |
| COUN 8030 | Counseling Practices | 3 |
| COUN 8110 | Human Development and Psycho- | 3 |
|  | Social Intervention Strategies |  |

## Electives (3 hours):

In consultation with an advisor, the student selects one additional counseling course. Suggests included (but are not limited to) the following:
COUN 8016 Child Abuse/Neglect 3
COUN 8200 Counseling Theories 3
COUN 8226 Career Development and Lifestyle 3
COUN 8250 Internship I - Community 3 Counseling
COUN 8270 Group Techniques in Guidance 1
COUN 8370 Group Counseling: Theory and 2 Practice

## CRIMINOLOGY AND CRIMINAL JUSTICE, PH.D.

School of Criminology \& Criminal Justice, College of Public Affairs \& Community Service

## Vision Statement

The vision of the School of Criminology and Criminal Justice is to be a program that is recognized nationally for its quality and impact on research and instruction. In terms of doctoral education, the aim is to foster a learning environment in which graduate students may gain the necessary knowledge, skills, and competencies to prepare them for careers in academia or in the public or private sectors. The curriculum emphasizes written and verbal communication skills, methodological competency, a strong statistical foundation, and hands-on research experience. Doctoral students will actively engage in research under the supervision of the Director of the School's Consortium for Crime and Justice Research, the Director of the Juvenile Justice Institute, and/or with faculty on local, national, and international projects. Such instruction and experiences will serve to enhance the national visibility of our students and faculty.

## Program Contact Information:

Dr. Pauline Brennan, Doctoral Graduate Program Chair (GPC)
College of Public Affairs and Community Service Building
(CB) 218 S
402-554-2205
pkbrennan@unomaha.edu
Program Website:
http://www.unomaha.edu/criminaljustice/phdcj.php

## Application Deadlines:

- Fall: February 1
- Spring: N/A
- Summer: N/A


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- An earned Master of Arts or Master of Science degree in criminology or criminal justice from an accredited institution is required for unconditional admission into the program.
- Applicants with a master's degree in an allied field (sociology, political science, public administration, etc.) and who lack substantial coursework in criminology \& criminal justice may be granted provisional admission. They will be granted unconditional admission upon successful completion of 18 hours of criminology \& criminal justice coursework from the core curriculum.
- Outstanding applicants who have completed a baccalaureate degree and wish to be considered for the doctoral program may be provisionally admitted, but must first complete the requirements for the Master of Arts degree prior to unconditional admission into the Ph.D. program.
- International students seeking admission to the program must meet UNO Graduate College requirements governing the admission of international students. In addition to these requirements, all ESL students are required to submit scores from the IELTS, the internetbased TOEFL (the paper TOEFL will NOT be accepted), or PTE exam. Minimum required scores are as follows:
- IELTS: minimum score of 7.5 is required; 8.0 is preferred
- Internet-based TOEFL: minimum score of 21 in each of the four areas, and a minimum overall score of 95
- PTE: 76 or higher
- NOTE : all English-as-second-language students will be required to take a proficiency assessment examination upon admission. That assessment will be used to determine if further assistance is required.
- Decisions regarding admission to the program are made by the Graduate Recruitment and Admissions Committee in the School of Criminology \& Criminal Justice. The Committee will evaluate applicant materials and make recommendations for student admissions during the spring semester of each year, and newly admitted students will begin taking courses in the fall semester of each year. Admissions decisions are competitive. If more students than the School can reasonably handle apply for admission in any given year, the Committee will admit those most qualified.
- Entrance Exam: GRE is required
- A combined score of at least 300 on the verbal and quantitative portions of the revised Graduate Record Examination (GRE); students demonstrating exceptional academic potential may be considered with a GRE score of less than 300.
- Three (3) Letters of Recommendation
- From individuals who are qualified to comment on the applicant's ability to pursue doctoral-level coursework. At least two of the three letters must be from academics who have known the applicant as a student and/or as an individual who worked under their direct supervision.
- Statement of Purpose
- Not to exceed five (5) typewritten, double-spaced pages, describing the applicant's prior education, relevant professional experience, career goals, and the specific relationship of the Ph.D. degree to the achievement of these goals. If there are particular faculty the applicant is interested in working with, or areas of study that he or she would like to pursue, this information should also be included in the statement. Applicants should also indicate in their statement of intent if they wish to be considered for a graduate assistantship.
- Writing Sample
- This may be a chapter from a master's thesis, a published article, or a manuscript written in a scholarly style.
- Resume


## CRCJPHD DEGREE REQUIREMENTS

CRCJPHD Required Courses:
Required Courses (24 hours):

| CRCJ 8210 | Program Evaluation and Policy <br> Analysis | 3 |
| :--- | :--- | ---: |
| CRCJ 9020 | Seminar on Theories of Crime | 3 |
| CRCJ | Advanced Statistical Applications | 3 |
| 9080/PA |  | 3 |
| 9080 | Special Problems in Research | 3 |
| CRCJ 9090 | Methods <br> CRCJ 9100 | Special Problems in Statistical |
| CRCJ 9050 | Analysis | 3 |
| CRCJ 9700 | Teaching Writing | 3 |
| CRCJ 9800 | College/University Level <br> Advanced Research Design | 3 |
| CR | 3 |  |

CRCJ 9080: (Statistics 2)
CRCJ 9090: (either quantitative or qualitative)
CRCJ 9100: (Statistics 3)

## Both 8000- and 9000-level elective courses are available to doctoral students.

There is a series of 9000 -level courses that are required for doctoral students.

A maximum of six (6) hours of dual-level courses (4---/8-6 course number) can be included in the program of study.

A maximum of nine (9) hours of directed readings (CRCJ 9980) may be included in the program of study; six (6) of these hours must be used for the comprehensive examination. All coursework, excluding coursework in the form of directed readings related to the comprehensive examination, must be completed within two (2) years from the time a student's program of study is approved by the Dean of Graduate Studies. Six (6) hours for directed readings are to be used for the comprehensive examination in the fall semester of the student's third year in the program. All students will be required to complete all courses listed as required courses. Students also must take elective courses in criminal justice or related fields.

## Students are expected to complete 36 hours of coursework within two years

Except in extraordinary circumstances. Some of these hours may be taken during summer semesters.

## CRCJPHD Electives (18 hours):

## All doctoral students will select six (6) courses from the

 electives list for a total of $\mathbf{1 8}$ hours.One of these elective courses must be a required three-hour diversity course that may be fulfilled by:
CRCJ 9030 Seminar on Minorities and the 3
Criminal Justice System
CRCJ 8130 Seminar in Women and Criminal 3 Justice
or a master's-level or higher course from another department as approved by the Supervisory Committee Chair and the Doctoral Program Chair.
Courses:
CRCJ 8030 Criminal Justice Research Theory 3

CRCJ 8050
CRCJ 8060 Seminar in the Criminal Court 3
System
CRCJ 8070 Seminar in Criminal Law and 3
Procedure
CRCJ 8080 Seminar in Juvenile Justice 3
CRCJ 8090 Seminar in Theoretical Criminology 3
CRCJ 8100 Criminal Justice Organization, 3
Administration and Management
CRCJ 8110 Criminal Justice Planning and Change
CRCJ 8130 Seminar in Women and Criminal 3
Justice
CRCJ 8200 Special Problems in Criminal Justice 3
CRCJ 9000 Theory II and Theory Construction 3
CRCJ 9010 Seminar on Law and Social Control 3
CRCJ 9030 Seminar on Minorities and the 3
Criminal Justice System
CRCJ 9040 Comparative Criminology and 3
Criminal Justice Systems
CRCJ 9090 Special Problems in Research 3
Methods
CRCJ 9110 Seminar on Police Organization and 3
Management
CRCJ 9120 Seminar on Police Effectiveness 3
CRCJ 9130 Advanced Research on Policing 3
CRCJ 9150 Special Topics in Criminology and 3 Criminal Justice
CRCJ 9160 Seminar in Community-Based 3
Corrections
CRCJ 9170 Seminar on Institutional Corrections 3
CRCJ 9180 Seminar on the Criminal Court 3
System
CRCJ 9200 Seminar on Violent Crime and 3
Criminal Behavior
CRCJ 9980 Directed Readings in Criminology 1 -
and Criminal Justice 6

## CRCJ 9980: 1-9 hours

## CRCJPHD Exit Requirements:

## Dissertation:

Students may begin work on the dissertation after successful completion of the comprehensive examination. The dissertation must reflect original scholarship and contribute to the body of knowledge on Criminology \& Criminal Justice. The dissertation topic must be approved by the student's Dissertation Committee, which consists of a chair and three other members. One Committee member must be a faculty member from outside the School of Criminology \& Criminal Justice. The dissertation topic, prospectus, and the dissertation all require the approval of the Dissertation Committee. A doctoral student will be required to take at least one hour of CRCJ 9990 Dissertation each fall and spring semester while working toward the completion of the dissertation. A minimum of 20 credit hours of CRCJ 9990 is required for all doctoral students.
CRCJ 9990 Dissertation 1 -

## Comprehensive Examination and Admission to Candidacy

After completion of 36 hours of coursework, doctoral students will be required to establish a Comprehensive Examination Committee and successfully pass the examination. Students are expected to work on their comprehensive examinations during the fall semester of their third year in the program. During this time, students are expected to take six (6) hours of CRCJ 9980 Directed Readings. It is, therefore, expected that a doctoral student will complete 42 hours of coursework by the end of the fall semester of their third year.

TOTAL CREDIT HOURS: A minimum of 92 graduate hours beyond the baccalaureate degree. This includes up to 30 hours earned in a master's degree. Satisfactory completion of a teaching practicum is also required.

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*** Redirect Link ***
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*** Criminology-and-Criminal-Justice-Minor ***

## M.S.W./CRIMINOLOGY AND CRIMINAL JUSTICE M.S.

Grace Abbott School of Social Work, College of Public Affairs \& Community Service

School of Criminology \& Criminal Justice, College of Public Affairs \& Community Service
Vision Statement
Program Contact Information
Program Website:
http://www.unomaha.edu/socialwork/graduate.php\#mpa

## Application Deadlines:

- Fall: January 15
- Spring: NA
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required (minimum scores established by the Graduate Council).
- 500 for Written TOEFL
- 173 for computer-based TOEFL
- 61 for internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Entrance Exam
- GRE Score required if applicant's undergraduate GPA is between 2.7 and 3.0
- Three (3) Letters of Recommendation
- Statement of Purpose (Personal Essay)
- Five-page personal statement; specific criteria for the essay can be found at www.unomaha.edu/socialwork/documents/MSW_a dmissions_info.pdf
- Updated Resume or Work History

MSW-CRCJMS DEGREE REQUIREMENTS
MSW-CRCJMS Required Courses ( 54 hours):
Required courses for the MSW (24 hours):
SOWK 8190 Research \& Computer Applications 3
SOWK 8220 Clinical Social Work with 3 Individuals
SOWK 8250 Social Work Practice with Families 3
SOWK 8510 Supervision and Personnel 3
Administration
SOWK 8540 Social Welfare Planning 3
SOWK 8560 Advanced Community Practice 3
SOWK 8570 Administration of Social Welfare 3 Agencies

SOWK 8940 Evaluation of Social Programs
Social Issue/Policies/Service Delivery (3 hours; choose one):
SOWK 8600 Permanence for Children 3
SOWK 8610 Family and Community Violence 3
SOWK 8650 Health/Mental Health Policy for 3 Social Work
SOWK Medical and Psychosocial Aspects
8686/COUN of Alcohol/Drug Use and Addiction
8686/SOWK
4680/COUN
4680

SOWK 8410 Advanced Social Work Practicum II

Required courses for the MS-Criminology and Criminal Justice ( 12 hours):
CRCJ 8010 Nature of Crime 3
CRCJ 8020 Seminar in Administration of Justice 3
CRCJ 9020 Seminar on Theories of Crime 3
CRCJ 8970 Capstone Project in Criminology and 3
Criminal Justice

MSW-CRCJMS Electives (6 hours; choose 2):
CRCJ 8040 Seminar in Police and Society 3
CRCJ 8050 Seminar in Corrections 3
CRCJ 8060 Seminar in the Criminal Court 3 System
CRCJ 8080 Seminar in Juvenile Justice 3
CRCJ 8130 Seminar in Women and Criminal 3 Justice
CRCJ 8210 Program Evaluation and Policy Analysis
CRCJ 8190 Independent Study 1 -
CRCJ 9150 Special Topics in Criminology and 3 Criminal Justice
CRCJ 8160 Seminar in Community-Based Corrections
CRCJ 9170 Seminar on Institutional Corrections
CRCJ 9200 Seminar on Violent Crime and Criminal Behavior

## MSW-CRCJMS Exit Requirements:

Candidates for the dual MSW/MS in Criminology \& Criminal Justice degree must pass a comprehensive exam administered by the School of Social Work in the fall and spring semesters of each academic year.

## MSW-CRCJMS Other Requirements:

All courses taken to fulfill the MSW and MS degree requirements must be passed with a " $B$ " or better ( 3.0 on a 4.0 scale).

Students enrolled in the MSW program are required to meet all standards in the Academic Policies and Standards of the Grace Abbott School of Social Work; standards for academic, ethical, and professional behavior are described with adherence to all policies and procedures expected.
When a student performs at a level below the required standards for successful progress in the graduate program (i.e., GPA falls below 3.00 , receipt of a grade below "B", or other instances), the Office of Graduate Studies notifies the Master's Program Coordinator for Social Work and Criminology \& Criminal Justice. The Coordinator, along with the School Director and/or students' supervisory committees, will follow the guidelines established in the Academic and Professional Standards of the GASSW and the School of Criminology \& Criminal Justice with a decision on whether to dismiss the student from the program or place the student on academic probation with a set of expectations to be completed in order to be released from academic probationary status. If the student successfully completes those expectations, he or she will be taken off probation by the Office of Graduate Studies.

It is the expectation of the School that if the reason for probation is the receipt of a grade lower than " $B$ ", then the student will retake that course and earn a grade of " B " or better. If the course is not offered for another year, the Coordinator and/or supervisory committee must meet with the student and review a new "Plan of Study" that provides a suitable substitute course. If the course is a required course, the student must take it again.

If the probation is the result of the student's GPA falling below 3.0, then the student has one semester to raise the GPA back above 3.0.

In other instances, such as a student's failure to make adequate academic progress in their program, students can be placed on probation, have academic funding stopped, or be dismissed from the program.
Total Credit Hours: 54
Economics

## Economics

ECONOMICS, M.A.
Department of Economics, College of Business Administration

## Vision Statement

The graduate program in economics is designed to provide a solid background in theory, quantitative methods and application appropriate to the needs of economists
involved in the analysis of domestic and international business and economic conditions, financial analysis, policy analysis, forecasting, simulation and related work. In addition, the program prepares students for further graduate work in economics and related fields.

## Program Contact Information

Dr. Donald Baum, Graduate Program Chair
Mammel Hall (MH) 332
6708 Pine Street
402-554-2538
dbaum@unomaha.edu

## Program Website:

http://cba.unomaha.edu/ECON/grad_links.cfm

## Application Deadlines:

## NOT APPLICABLE

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 2.7 in undergraduate courses related to the proposed major


## Program-Specific Requirements:

- To be admitted to the Economics Graduate Program, students whose language of nurture is not English must achieve a minimum score of
- 530 on the paper-based TOEFL (197 computerbased; 71 internet-based),
- 5.5 on the IELTS, or
- 49 in the PTE
- Minimum GPA must be at least 2.85 in undergraduate courses related to the proposed major
- The minimum course requirements for admissions are economics courses through intermediate macroeconomic theory and intermediate microeconomic theory (i.e., one theory course in
each area beyond the principles of economics courses) and one course in statistics. If you have not taken some of these courses, but your credentials are otherwise satisfactory, you will be admitted provisionally and asked to take the appropriate undergraduate courses.
- New Economics graduate students will be admitted only to the MS in Economics Program (non-thesis). After completing nine (9) hours of coursework in the Master's in Economics program, a student may submit a written request to the Economics Graduate Program Committee (GPC) to transfer from the MS program to the MA (thesis) program. The student's request should state the field of economics in which he/she is interested in writing a thesis and the thesis topic. The student should attach an unofficial graduate transcript, a writing sample, and any other relevant information to the request. The GPC, based on its evaluation of the student's potential to complete a quality master's thesis, will approve or deny this request. If the GPC denies the student's request to transfer to the MA program, the student may submit a second written request to transfer to the MA program with supporting material to the GPC after he/she has completed 18 credit hours of coursework in the Master's in Economics Program.


## MA-ECON DEGREE REQUIREMENTS

MA-ECON Required Courses (12-15 hours):
ECON Research Methods in Economics and
8296/ECON Business
4290/BSAD
8026
ECON Quantitative Applications in 3
8306/ECON Economics and Business
4300
ECON 8220 Seminar in Macro Theory 3
ECON 8200 Seminar in Micro Theory 3
ECON 8300 Econometrics
ECON 8306: This course is not required for students demonstrating satisfactory mathematical skills. If it is not taken, students should take three (3) additional hours of elective courses.

## MA-ECON Electives (12-15 hours):

Elective coursework will be selected in consultation with the Graduate Program Chair, OR students can choose to complete a concentration.
MA-ECON Concentrations (9 hours):
See Economics, M.A. Concentrations (p. 63)
MA-ECON Exit Requirements (6 hours):
ECON 8990 Thesis

All candidates should carefully review the Graduate
College requirements for forming the Supervisory
Committee, the Thesis/Thesis Equivalent Proposal
Approval Forms, and final approval and submission of the thesis.

Total Credit Hours: 30
ECONOMICS, M.A. CONCENTRATIONS
(9 hours):
BUSINESS ECONOMICS

| (select 3 courses from below): |  |  |
| :---: | :---: | :---: |
| ECON | Environmental Economics and | 3 |
| 8020/BSAD | Management |  |
| 8020 |  |  |
| ECON 8160 | Seminar in Labor Economics | 3 |
| ECON | Managerial Economics | 3 |
| 8210/BSAD |  |  |
| 8100 |  |  |
| ECON | Industrial Organization | 3 |
| 8216/ECON |  |  |
| 4210 |  |  |
| ECON 8230 | Business Conditions Analysis | 3 |
| ECON | Business Forecasting | 3 |
| 8310/BSAD |  |  |
| 8080 |  |  |
| ECON | Economics of Technology | 3 |
| 8346/ECON |  |  |
| 4340 |  |  |
| ECON | Monetary Theory and Policy | 3 |
| 8456/ECON |  |  |
| 4450 |  |  |
| ECON | International Trade | 3 |
| 8616/ECON |  |  |
| 4610 |  |  |
| ECON | International Monetary Economics | 3 |
| 8626/ECON |  |  |
| 4620 |  |  |
| ECON | Economics of eBusiness | 3 |
| 8706/ECON |  |  |
| 4700/BSAD |  |  |
| 8706 |  |  |
| ECON | Economics of Entrepreneurship | 3 |
| 8736/ECON |  |  |
| 4730/BSAD |  |  |
| 8736 |  |  |
| ECON 8940 | Economic Internship | 1 - |

INTERNATIONAL ECONOMICS
(select 3 courses from below):
ECON International Trade
8616/ECON
4610

ECON International Monetary Economics 3
8626/ECON
4620
ECON 8650 Seminar in International Economics 3
ECON International Economic 3
8666/ECON Development
4660
ECON 8540
Multinational Financial
Management

## MONETARY AND FINANCIAL ECONOMICS

(select 3 courses from below):

8020/BSAD Management
8020

8216/ECON
4210
8266/ECON
4260
ECON
8310/BSAD
8080
ECON
$8346 / E C O N$
4340
ECON 8450
ECON
8456/ECON
4450
ECON
8616/ECON
4610
ECON 8650
ECON
8626/ECON
4620
ECON
8706/ECON

| (select $\mathbf{3}$ courses from below): |  |  |
| :--- | :--- | :--- |
| ECON 8010 | Seminar: Public Finance | 3 |
| ECON | International Monetary Economics | 3 |
| $8626 /$ ECON |  |  |
| 4620 |  | 3 |
| ECON 8450 | Seminar in Money and Banking | 3 |
| ECON | Monetary Theory and Policy |  |
| $8456 /$ ECON |  | 3 |
| 4450 |  |  |
| ECON 8530 | Banking and Financial Markets | 3 |
| PH.D. PREPARATORY |  |  |

ECON 8010 Seminar: Public Finance 3
ECON Environmental Economics and 3

ECON 8160 Seminar in Labor Economics 3
ECON Industrial Organization 3

ECON History of Economic Thought 3

ECON 8600 Health Economics 3

4700/BSAD
8706
ECON Economics of Entrepreneurship
8736/ECON
4730/BSAD
8736

## PUBLIC POLICY ECONOMICS

| (select 3 from below): |  |  |
| :---: | :---: | :---: |
| ECON 8010 | Seminar: Public Finance | 3 |
| ECON | Environmental Economics and | 3 |
| 8020/BSAD | Management |  |
| 8020 |  |  |
| ECON 8160 | Seminar in Labor Economics | 3 |
| ECON | Managerial Economics | 3 |
| 8210/BSAD |  |  |
| 8100 |  |  |
| ECON | Industrial Organization | 3 |
| 8216/ECON |  |  |
| 4210 |  |  |
| ECON 8230 | Business Conditions Analysis | 3 |
| ECON | Natural Resource Economics | 3 |
| 8326/ECON |  |  |
| 4320 |  |  |
| ECON | Economics of Technology | 3 |
| 8346/ECON |  |  |
| 4340 |  |  |
| ECON | Monetary Theory and Policy | 3 |
| 8456/ECON |  |  |
| 4450 |  |  |
| ECON | State and Local Finance | 3 |
| 8566/ECON |  |  |
| 4560 |  |  |
| ECON 8600 | Health Economics | 3 |
| ECON | Economics of eBusiness | 3 |
| 8706/ECON |  |  |
| 4700/BSAD |  |  |
| 8706 |  |  |
| ECON | Economics of Entrepreneurship | 3 |
| 8736/ECON |  |  |
| 4730/BSAD |  |  |
| 8736 |  |  |

REAL ESTATE AND LAND USE ECONOMICS (9-12 HOURS):

| Required courses (6 hours): |  | 3 |
| :--- | :--- | :--- |
| BSAD 8600 | Real Estate and Land Use <br> Economics Theory | 3 |
| BSAD 8610 | Current Problems in Real Estate and <br> Land Use Economics | 3 |

## Electives (3-6 hours):

to be selected in consultation with the Graduate Program Chair

ECONOMICS, M.S.

## Department of Economics, College of Business Administration <br> Vision Statement

The graduate program in economics is designed to provide a solid background in theory, quantitative methods and application appropriate to the needs of economists involved in the analysis of domestic and international business and economic conditions, financial analysis, policy analysis, forecasting, simulation and related work. In addition, the program prepares students for further graduate work in economics and related fields.
Program Contact Information
Dr. Donald Baum, Graduate Program Chair
Mammel Hall (MH) 332
6708 Pine Street 402-554-2538
dbaum@unomaha.edu
Program Website: http://cba.unomaha.edu/ECON/grad_links.cfm

## Application Deadlines:

- Fall: August 1
- Spring: December 10
- Summer: April 15


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 2.7 in undergraduate courses related to the proposed major


## Program-Specific Requirements:

- To be admitted to the Economics Graduate Program, students whose language of nurture is not English must achieve a minimum score of
- 530 on the paper-based TOEFL (197 computerbased; 71 internet-based),
- 5.5 on the IELTS, or
- 49 in the PTE
- Minimum GPA must be at least 2.85 in undergraduate courses related to the proposed major
- The minimum course requirements for admissions are economics courses through intermediate macroeconomic theory and intermediate microeconomic theory (i.e., one theory course in each area beyond the principles of economics courses) and one course in statistics. If you have not taken some of these courses, but your credentials are otherwise satisfactory, you will be admitted provisionally and asked to take the appropriate undergraduate courses.
- New Economics graduate students will be admitted only to the MS in Economics Program (non-thesis). After completing nine (9) hours of coursework in the Master's in Economics program, a student may submit a written request to the Economics Graduate Program Committee (GPC) to transfer from the MS program to the MA (thesis) program. The student's request should state the field of economics in which he/she is interested in writing a thesis and the thesis topic. The student should attach an unofficial graduate transcript, a writing sample, and any other relevant information to the request. The GPC, based on its evaluation of the student's potential to complete a quality master's thesis, will approve or deny this request. If the GPC denies the student's request to transfer to the MA program, the student may submit a second written request to transfer to the MA program with supporting material to the GPC after he/she has completed 18 credit hours of coursework in the Master's in Economics Program.


## MS-ECON DEGREE REQUIREMENTS

| MS-ECON Required Courses (12-15 hours): |  |
| :--- | :--- |
| ECON | Research Methods in Economics and |
| 8296/ECON | Business |
| 4290/BSAD |  |
| 8026 |  |
| ECON | Quantitative Applications in |
| 8306/ECON | Economics and Business |
| 4300 |  |
| ECON 8220 | Seminar in Macro Theory |
| ECON 8200 | Seminar in Micro Theory |
| ECON 8300 | Econometrics |

ECON 8220 Seminar in Macro Theory

ECON 8300 Econometrics
ECON 8306: This course is not required for students demonstrating satisfactory mathematical skills. If it is not taken, students should take three (3) additional hours of elective courses.

## MS-ECON Electives (12-15 hours):

Elective coursework will be selected in consultation with the Graduate Program Chair, OR students can choose to complete a concentration.
MS-ECON Concentrations (9 hours):
See Economics, M.S. Concentrations (p. 65)
MS-ECON Exit Requirements:
Comprehensive Examination
Total Credit Hours: 36
ECONOMICS, M.S. CONCENTRATIONS
( 9 hours):
BUSINESS ECONOMICS

## (select 3 courses from below):

ECON Environmental Economics and 3
8020/BSAD Management
8020
ECON 8160
Seminar in Labor Economic
ECON
8210/BSAD
8100
ECON
8216/ECON
4210
ECON 8230
ECON
8310/BSAD
8080
ECON
8346/ECON
4340
ECON
8456/ECON
4450
ECON
8616/ECON
4610
ECON
8626/ECON
4620
ECON
8706/ECON
4700/BSAD
8706
ECON
8736/ECON
4730/BSAD
8736
ECON 8940

Business Conditions Analysis 3
Business Forecasting

Economics of Technology

Monetary Theory and Policy

International Trade

International Monetary Economics

Economics of eBusiness
3

3

1 -

| INTERNATIONAL ECONOMICS |  |  |
| :---: | :---: | :---: |
| (select 3 courses from below): |  |  |
| ECON | International Trade | 3 |
| 8616/ECON |  |  |
| 4610 |  |  |
| ECON | International Monetary Economics | 3 |
| 8626/ECON |  |  |
| 4620 |  |  |
| ECON 8650 | Seminar in International Economics | 3 |
| ECON | International Economic | 3 |
| 8666/ECON | Development |  |
| 4660 |  |  |
| ECON 8540 | Multinational Financial | 3 |
|  | Management |  |
| MONETARY AND FINANCIAL ECONOMICS |  |  |
| (select 3 courses from below): |  |  |
| ECON 8010 | Seminar: Public Finance | 3 |
| ECON | International Monetary Economics | 3 |
| 8626/ECON |  |  |
| 4620 |  |  |
| ECON 8450 | Seminar in Money and Banking |  |
| ECON | Monetary Theory and Policy | 3 |
| 8456/ECON |  |  |
| 4450 |  |  |
| ECON 8530 | Banking and Financial Markets | 3 |
| PH.D. PREPARATORY |  |  |
| (select 3 courses from below): |  |  |
| ECON 8010 | Seminar: Public Finance | 3 |
| ECON | Environmental Economics and | 3 |
| 8020/BSAD | Management |  |
| 8020 |  |  |
| ECON 8160 | Seminar in Labor Economics | 3 |
| ECON | Industrial Organization | 3 |
| 8216/ECON |  |  |
| 4210 |  |  |
| ECON | History of Economic Thought | 3 |
| 8266/ECON |  |  |
| 4260 |  |  |
| ECON | Business Forecasting | 3 |
| 8310/BSAD |  |  |
| 8080 |  |  |
| ECON | Economics of Technology | 3 |
| 8346/ECON |  |  |
| 4340 |  |  |
| ECON 8450 | Seminar in Money and Banking | 3 |
| ECON | Monetary Theory and Policy |  |
| 8456/ECON |  |  |
| 4450 |  |  |
| ECON 8600 | Health Economics | 3 |
| 8616/ECON International Trade |  |  |
|  |  |  |
| 4610 |  |  |


| ECON 8650 | Seminar in International Economics | 3 |
| :--- | :--- | ---: |
| ECON | International Monetary Economics | 3 |
| $8626 /$ ECON |  |  |
| 4620 |  | 3 |
| ECON | Economics of eBusiness |  |
| $8706 / E C O N$ |  | 3 |
| 4700/BSAD |  |  |
| 8706 |  |  |
| ECON | Economics of Entrepreneurship |  |
| 8736/ECON |  |  |
| 4730/BSAD |  |  |
| 8736 |  |  |
| PUBLIC POLICY ECONOMICS |  |  |

(select 3 from below):
ECON 8010 Seminar: Public Finance 3
ECON Environmental Economics and 3
8020/BSAD Management
8020
ECON 8160 Seminar in Labor Economics 3
ECON Managerial Economics
8210/BSAD
8100
ECON
$8216 / E C O N$
4210
ECON 8230
ECON
8326/ECON
4320
ECON
8346/ECON
4340
8456/ECON
4450
ECON
4560
ECON 8600 Health Economics 3
ECON
8706/ECON
4700/BSAD
8706
ECON Economics of Entrepreneurship
3

## Educational Administration and Supervision

## EDUCATIONAL ADMINISTRATION AND SUPERVISION, M.S.

## Department of Educational Administration \& Supervision, College of Education

## Vision Statement

The Department of Educational Administration and Supervision offers graduate programs leading to the Master of Science Degree in Education (MS) and the Joint Doctoral Degree in Education (Ed.D., in conjunction with the University of Nebraska-Lincoln). The department also provides a non-degree administration endorsement program for students who have completed a master's degree. The department's degree and endorsement programs have a distinctive metropolitan education orientation and are designed to prepare educators capable of providing effective leadership, particularly in metropolitan school districts.

## Program Contact Information:

Dr. Kay Keiser, Graduate Program Chair
Roskens Hall 312
402-554-3443
kkeiser@unomaha.edu

## Program Website:

http://coe.unomaha.edu/edad/masters_prog.php

## Application Deadlines:

Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- 2 Letters of Recommendation
- Statement of Purpose
- 1-2 pages that addresses such topics as why you want to become a school administrator; interests; experiences; and career goals
- Resume
- Copy of Teaching Certificate
- Rule 20/21 Form
- Evidence that the candidate has met the State of Nebraska's Special Education and Human Resources requirements. Most candidates will probably have satisfied this requirement while earning their teaching endorsements; if not, they will be required to complete relevant coursework.

MS-EDAD DEGREE REQUIREMENTS
MS-EDAD Required Courses ( $\mathbf{3 3}$ hours):
TED 8010 Introduction to Research 3
EDAD 8020 Governance and Politics in 3
Education
EDAD 8030 Introduction to Educational 3
Leadership
EDAD 8050 School-Community Relations 3
EDAD 8490 Leadership in Curriculum and 3 Instruction
EDAD 8710 Interpersonal Relationships in 3
Educational Leadership
EDAD 9540 School Law 3
EDAD 8700 Administration of Human Resources 3 in Schools
EDAD 8550 School Business Management 3
EDAD 8470 Administration and Supervision in 3 Schools
EDAD 8400 Elementary School Practicum in 3
Educational Administration and Supervision

EDAD 9540, EDAD 8550: Courses are required for
Principal Certification. Candidates earning endorsement as a Curriculum Supervisor do not take courses designated
with an asterisk (*). Curriculum supervisor endorsement will include twelve (12) hours of coursework in the candidate's field as accepted by the Educational Administration \& Supervision Department.

EDAD 8400: (after 24 hours in the program)
MS-EDAD Electives ( 6 hours):
EDAD 8560 School Finance
EDAD 8620 School Plants and Equipment 3
EDAD 8800 School Leadership Academy 3

EDAD 8810 Urban School Administration 3
EDAD 9550 Symposium on School Leadership 3
EDAD 9650 Program Evaluation for Educational Administrators
Other approved elective courses

## MS-EDAD Exit Requirements:

Comprehensive Examination
Total Credit Hours: 39

## EDUCATIONAL ADMINISTRATION AND SUPERVISION, ED.D.

## Department of Educational Administration \&

Supervision, College of Education

## Vision Statement

The Department of Educational Administration and Supervision offers graduate programs leading to the Master of Science Degree in Education (MS) and the Joint Doctoral Degree in Education (Ed.D.), in conjunction with the University of Nebraska-Lincoln. The department also provides a non-degree administration endorsement program for students who have completed a master's degree.

The department's degree and endorsement programs have a distinctive Metropolitan education orientation and are designed to prepare educators capable of providing effective leadership, particularly in metropolitan school districts.

## Program Contact Information:

Dr. Kay Keiser, Graduate Program Chair
Roskens Hall 312
402-554-3443
kkeiser@unomaha.edu
Program Website:
http://coe.unomaha.edu/edad/doctorate.php

## Application Deadlines:

- Fall: June 1
- Spring: October 1
- Summer: February 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Graduate Record Exam (GRE) required
- 3 Letters of Recommendation
- Statement of Purpose
- A 1-2 page document describing the applicant's prior education, relevant professional experience, career goals and specific relationship to the Ed.D. degree, with regard to the achievement of these goals.
- Writing Sample
- 3 samples, including one with a reference section (or thesis/specialist field project)
- Resume
- Administrative Certificate (or Specialist Degree)


## EDD-EDAM DEGREE REQUIREMENTS

## EDD-EDAM Required Seminar Courses (9 hours):

The program requires a total of 96 hours of coursework.
At least $\mathbf{4 5}$ hours of new work must be completed after admission to the doctoral program.

| EDAD 9510 | Seminar in Culture and Context of <br> Schooling | 3 |
| :--- | :--- | :--- |
| EDAD 9520 | Achieving School Excellence | 3 |
| EDAD 9530 | Paradigms and Practices of | 3 |
|  | Schooling |  |

EDD-EDAM Required Research Tools/Methods (12 hours):
EDAD 9000 Dissertation Research Design in 3
Educational Administration
EDAD 9610 Applied Intermediate Statistics in Educational Administration
EDAD 9620 Applied Advanced Statistics in 3
Educational Administration
EDAD 9650 Program Evaluation for Educational Administrators

EDD-EDAM Electives ( 12 hours):
EDAD 8560 School Finance
EDAD 8620 School Plants and Equipment 3
EDAD 9550 Symposium on School Leadership 3
EDAD 9980 Superintendent Internship in 3

## Educaional Administration

NOTE: These four courses are for Superintendent Certification. If the applicant is not pursuing Superintendent Certification, then twelve (12) hours of additional coursework will be determined with the applicant's advisor.
EDD-EDAM Exit Requirements:
Comprehensive Examination
EDAD 9990 Dissertation

Total Credit Hours: 96

## Education

## ELEMENTARY EDUCATION, M.S.

## Department of Teacher Education, College of Education

## Vision Statement

The master's degree in Elementary Education will:

- Extend 21st-century teaching skills and technology applications.
- Enhance the ability to design engaging, authentic instruction for today's students.
- Emphasize diversity and culturally responsive teaching.
- Expand professional connections with educators from Midwestern and metro school districts with diverse perspectives.
- Encourage engagement with the community.
- Enable graduate students to make course selections that best fit their individual learning needs in a flexible program.


## Program Contact Information

Dr. Kathy Danielson
Roskens Hall (RH) 308
402-554-2218
kdanielson@unomaha.edu

## Program Website

http://coe.unomaha.edu/ted/

## Application Deadlines:

- Fall: August 1
- Spring: December 1
- Summer: June 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on Written TOEFL
- 173 on computer-based TOEFL
- 61 on internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 2.7 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- An undergraduate GPA of 3.0 (on a 4.0 scale) or above in education; completion of undergraduate GPA deficiencies
- International students who do not expect to teach in the U.S. may be eligible for admission. Please contact program chair for more information.
- International students seeking admission to the graduate program must have a minimum TOEFL score of 550 paper, 213 computer, or 79-80 internet based; or a minimum IELTS score of 7
- Candidates are admitted provisionally until completion and successful evaluation of the selective retention materials. Submitted materials are reviewed to determine if the candidate's status will be changed to unconditional. Unconditional status means the candidate is fully admitted to the program leading to a master's degree. Selective retention replaces the admission exam.


## MS-ELED DEGREE REQUIREMENTS

MS-ELED Required Courses-Non-thesis option (9 hours):

It is strongly recommended that these courses be taken early in the program.
TED 8010 Introduction to Research 3
TED 8060 Current Issues and Trends in 3
Education
OR
TED 8190 Contemporary Issues in Urban 3
Education
TED 8700 Elementary Education Capstone 3
Course
MS ELED Required Courses-Thesis option (9 hours):
TED 8010 Introduction to Research
TED 8990 Thesis 1 -

## MS-ELED Related Courses (9 hours):

Candidates are to take one course each in three of the four strands. They may choose from the courses listed or select other courses with the approval of their advisor.

| Assessment and Instruction Strand |  |
| :---: | :---: |
| TED 8070 | Teaching Multiple Intelligence |
| TED 8210 | Human Relations for Bias Free Education |
| TED 8250 | Assessment for the Classroom Teacher |
| TED 9200 | Critical Pedagogy: Teaching for Social Justice |
| SPED | Language Development and |
| 8236/SPED | Disorders for Teachers |
| 4230 |  |
| SPED 8910 | Assessment in Special Education Any assessment and instruction course or workshop, pending advisor's approval |
| Early Childhood Education Strand |  |
| TED | Parent Involvement in Early |
| 8246/TED | Childhood Education |
| 4240 |  |
| TED | Current Trends in Early Childhood |
| 8276/TED | Education |
| 4270 |  |
| TED 8220 | Play as a Learning Medium in Early Childhood Education |
| TED 8260 |  |
|  | Implementation in Early Childhood |
|  | Ed. |
|  | Any early childhood course or workshop, pending advisor's approval |
| Literacy Strand |  |
| TED 8130 | Language, Culture, and Power |
| TED 8410 | Improvement of Instruction: Special Topics |
| TED 8470 | Teaching the Language Arts |
| TED | Teaching of Writing Throughout the |
| 8616/TED | Curriculum |
| 4610 |  |
| TED 8650 | Children's Literature and Education |
| TED 8660 | Young Adult Literature and Education |
| TED 8800 | Multicultural Literature for Children and Youth |
| TED 9100 | Theories and Processes of Reading |
| TED 9110 | Principles and Practices for Teaching Reading |
| TED 9200 | Critical Pedagogy: Teaching for Social Justice |

Any literacy course or workshop, pending advisor's approval

## STEM Strand

| TED 8410 | Improvement of Instruction: Special <br> Topics | 3 |
| :--- | :--- | ---: |
| TED 8420 | Trends and Teaching Strategies in | 3 |
| TED | Science Education | Aerospace Education Workshop |
| 8510/AVN |  | 3 |
| 8510 |  | 3 |
| TED 8540 | Intro to Technology Tools for |  |
| TED 8570 | Learning | Internet in the Learning Process |
| GEOG 8500 | Special Topics in Geography | 3 |
|  |  | 3 |

## MS-ELED Electives (6 hours) Non-thesis option:

Courses to be determined in consultation with program advisor.

## MS-ELED Concentrations and Required Courses (12 hours):

Each student will include in his/her Plan of Study an area of concentration in a special field which will provide depth in an area of his/her interest. Courses within the concentrations will be decided upon in conference with the student's advisor. Possible concentrations
include: Bilingual Education, Early Childhood Education, ESL, Improvement of Instruction, Inclusionary Practices, School Library, Literacy, STEM, and Urban Schools.

MS-ELED Exit Requirements:
$\begin{array}{llr}\text { TED } 8700 & \begin{array}{l}\text { Elementary Education Capstone } \\ \text { Course } \\ \text { TED } 8990\end{array} & \text { OR }\end{array} \quad 30$

The professional project completed in this class will take the place of the comprehensive exam. Registration for the course will be by permission only (for students near the end of their program).

The thesis is completed under the direction of a major advisor and supervisory committee. Thesis hours will be used as electives, and required hours for degree completion is 36 total hours.

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval of a thesis and final submission of the thesis.

## MS-ELED-Other Program-Related Information:

## Selective Retention

Candidates are admitted provisionally until completion and successful evaluation of the selective retention materials. Submitted materials are reviewed to determine if the candidate's status will be changed to unconditional admission. Unconditional status means the candidate is fully admitted to the program leading to a master's degree. Selective retention replaces the admission exam. To move from provisional to unconditional status:

- During the term in which you will complete 12 hours of TED courses,
- Complete the Diversity Dispositions Index
- Submit a formal letter of application
- Complete a degree plan of study with an assigned advisor


## Unclassified Students

Students who are not planning to pursue a program leading to a graduate certificate or a master's degree can be admitted to the MS-Elementary Education program as unclassified students. Candidates holding a previous master's degree in education who are seeking additional teaching endorsements may wish to choose an unclassified status. Unclassified students are allowed to take courses for which they meet the prerequisite. Successful completion of graduate courses as an unclassified student does not obligate the department to accept those courses for credit toward the fulfillment of degree requirements. Formal advisement in an endorsement area is required. Students admitted as unclassified are not eligible for financial aid.

NOTE: The master's degree in Elementary Education does not lead to initial teacher certification.

## ELEMENTARY EDUCATION, M.S. CONCENTRATIONS

## and required courses ( 12 hours):

Concentration courses are to be selected from the listed options in consultation with program advisor.

## BEHAVIORAL DISORDERS CONCENTRATION

Select 12 credit hours from the courses listed below.

| SPED 8016 | Child Abuse/Neglect | 3 |
| :--- | :--- | :--- |
| SPED | Classroom Management | 3 |
| 8816/SPED |  |  |
| 4810 |  | 3 |
| SPED 8820 | Behavioral Disorders | 3 |
| SPED 8850 | Methods and Materials in |  |

## Behavioral Disorders

SPED 8860
Behavior Modification
Other courses with advisor's approval

SPED 8816: if taken as undergraduate, this class is not recommended)

## BILINGUAL EDUCATION CONCENTRATION

At least 6 credits in the concentration must have a TED prefix.

## Required Courses (9 hours)

| TED 8000 | Special Studies | $1-$ |
| :--- | :--- | ---: |
|  |  | 3 |
| TED 8470 | OR | Teaching the Language Arts |

TED 8000, TED 8695: These courses are taught in Spanish.

Elective Courses: Select a minimum of $\mathbf{3}$ hours from the list below.
TED Special Methods in the Content Area 3
8006/TED
4000
ENGL 8615 Introduction to Linguistics 3
ENGL Topics in Linguistics 3
8696/ENGL
4690
FLNG 8030
Seminar: Second Language 3
Acquisition Theory
TED
8616/TED
4610
TED 8980 Practicum: Various Content Areas 1 -
TED 8180
TED 8800 Multicultural Literature for Children 3 and Youth
TED 9100 Theories and Processes of Reading 3
Other courses with advisor's approval

TED 8616: This course is taught in Spanish.
TED 8980: (Deadline to apply is October 1)

## EARLY CHILDHOOD EDUCATION CONCENTRATION

Select a minimum of $\mathbf{1 2}$ hours from the courses listed below.

At least 6 credits in the concentration must have a TED prefix.

| TED 8220 | Play as a Learning Medium in Early Childhood Education |
| :---: | :---: |
| TED | Parent Involvement in Early |
| 8246/TED | Childhood Education |
| 4240 |  |
| TED 8260 |  |
|  | Implementation in Early Childhood |
|  | Ed. |
| TED | Current Trends in Early Childhood |
| 8276/TED | Education |
| 4270 |  |
| TED | Patterns of Care in Early Childhood |
| 8286/TED | Education |
| 4280 |  |
| TED | Learning Materials for Early |
| 8296/TED | Childhood Education |
| 4290 |  |

Or, with prior approval by the major advisor:
Any 3 credit Early Childhood Education workshop course
TED 8000 Special Studies 1 -

Any 3 credit Independent Study course
TED 8970 Independent Study

Other courses with advisor's approval
ENGLISH AS A SECOND LANGUAGE (ESL)/ENGLISH LANGUAGE LEARNERS (ELL) CONCENTRATION

At least 6 credits in the concentration must have a TED prefix.

## Required Courses (9 hours)

| TED | Special Methods in the Content Area | 3 |
| :--- | :--- | ---: |
| 8006/TED |  |  |
| 4000 |  | 3 |
| TED 8130 | Language, Culture, and Power <br> OR | 3 |
| ENGL | Sociolinguistics |  |
| $8676 /$ ENGL |  | 3 |
| 4670 | Foundations of English as a Second | 3 |
| TED 8055 | Language (ESL) |  |
| ENGL 8615 | OR |  |
|  | Introduction to Linguistics | 3 |

Elective Courses: Select a minimum of 3 hours from the list below.
TED 8140 Spanish Language Arts 3
TED 8980 Practicum: Various Content Areas 1 -
TED Teaching of Writing Throughout the 3
8616/TED
4610
TED 8800

TED 9110

TED 8470
TED 8180 Curriculum

Multicultural Literature for Children 3 and Youth Principles and Practices for 3 Teaching Reading Teaching the Language Arts 3 Culturally Responsive Teaching 3
Other courses with advisor's approval

## IMPROVEMENT OF INSTRUCTION CONCENTRATION

Select a minimum of $\mathbf{1 2}$ hours from the courses listed below.

At least 6 credits must have a TED prefix.
TED 8070 Teaching Multiple Intelligence 3
TED 8250 Assessment for the Classroom 3
Teacher
TED 8300 Effective Teaching Practices 3
TED 8330 Analysis of Teacher Behavior 3
TED 8410 Improvement of Instruction: Special 3
Topics
TED 8470 Teaching the Language Arts 3
TED Teaching of Writing Throughout the 3
8616/TED Curriculum
4610
SPED Classroom Management 3
8816/SPED
4810
TED $9110 \quad$ Principles and Practices for 3
TED technology course 3
Other courses with advisor's approval

## LEARNING DISABILITIES CONCENTRATION

Select a minimum of $\mathbf{1 2}$ hours from the courses listed below.
SPED Language Development and 3
8236/SPED Disorders for Teachers
4230
SPED 8400 Learning Disabilities 3
SPED 8910 Assessment in Special Education 3
SPED 8960 Advanced Diagnosis of Learning 3
Deficits
Instructional Strategies
3
approval

## LITERACY CONCENTRATION

Select a minimum of $\mathbf{1 2}$ hours from the courses listed below.

At least six credits in the concentration must have a TED prefix.

| TED 8030 | Seminar in Education: Special <br>  <br> Topics | $1-$ |
| :--- | :--- | ---: |
| TED 8080 | Storytelling and Education | 3 |
| TED 8410 | Improvement of Instruction: Special <br> Topics | 3 |
| TED 8470 | Teaching the Language Arts | 3 |
| TED | Teaching and Learning in Digital | 3 |
| 8596/TED | Environments |  |
| 4590 |  |  |
| TED | Teaching of Writing Throughout the | 3 |
| 8616/TED | Curriculum |  |
| 4610 |  |  |
| TED 8650 | Children's Literature and Education | 3 |
| TED 8800 | Multicultural Literature for Children <br> and Youth | 3 |
| TED 9100 | Theories and Processes of Reading <br> TED 9110 | Principles and Practices for |
|  | Teaching Reading |  |
| TED 9180 | Seminar in Research in Reading <br> TED 9190 | Applications of Literacy Instruction <br> \& Evaluation |
|  | Other courses with advisor's | 3 |
|  | approval |  |
|  |  |  |

TED 8410: (5 hours)

## MATH AND SCIENCE CONCENTRATION

| Required Courses (6 hours) |  |  |
| :--- | :--- | :--- |
| TED 8410 | Improvement of Instruction: Special <br> Topics | 3 |
| TED 8420 | Trends and Teaching Strategies in <br> Science Education | 3 |

Elective Courses: Select a minimum of 6 credit hours from the courses listed below.

At least six credits in the concentration must have a TED prefix.
TED
Aerospace Education Workshop

Digital Multi-media in Learning
Research Project
TED 8970
Independent Study

## TED 8600

Advanced Seminar in Educational Technology
approval

## SCHOOL LIBRARY CONCENTRATION (NONTHESIS OPTION ONLY):

| Required courses (12 hours) |  |  |
| :--- | :--- | :--- |
| TED | Leadership and Management in | 3 |
| 8806/TED | Libraries and Information Agencies |  |
| 4800 |  | 3 |
| TED 8710 | Reference Resources and Services | 3 |
| TED | Cataloging and Classification | 3 |
| 8746/TED |  |  |
| 4740 |  | 3 |
| TED 8760 | Managing Collections in Libraries | 3 |
|  | and Information Agencies |  |
| TECHNOLOGY CONCENTRATION |  |  |

12 hours to be determined with academic advisor
URBAN SCHOOLS CONCENTRATION

## Required Courses (9 hours)

| TED 8190 | Contemporary Issues in Urban | 3 |
| :--- | :--- | :--- |
| TED 8180 | Education | Culturally Responsive Teaching |
| TED 9200 | Critical Pedagogy: Teaching for | 3 |
|  | Social Justice | 3 |

Select a minimum of $\mathbf{3}$ hours from the courses listed below:

| TED 8800 | Multicultural Literature for Children <br> and Youth | 3 |
| :--- | :--- | :--- |
| UBNS | Race, Ethnicity and American Urban | 3 |

8020/BLST Culture
8020
GEOG Urban Geography 3
8126/GEOG
4120
HIST
8436/HIST
4430
SOC 8100 Social Inequality 3
SOC 8110 Social Problems of the 3
Disadvantaged
Other courses with advisor's approval

## INSTRUCTIONAL TECHNOLOGY

 CERTIFICATE
## Department of Teacher Education, College of Education

## Vision Statement

The Instructional Technology Certificate is designed for professional educators with a particular focus on teachers and administrators in K-12 schools. The certificate is
intended for individuals seeking to increase the use of technology in their classrooms; those who have been or will be assigned technology leadership roles in their building/school district; and, finally, students pursuing an educational master's degree program with a focus on technology.

The focus of the certificate program is the effective use of technology in the learning process, an important topic in today's educational community. Upon completion of this certificate, the educator will have been exposed to various technologies and their uses in the school setting, will be able to use technological tools, and will be able to effectively infuse technology into the learning process.

## Program Contact Information

Dr. Wilma Kuhlman, Graduate Program Chair (GPC) Roskens Hall (RH) 308
402-554-3926
wkuhlman@unomaha.edu

## Program Website:

http://coe.unomaha.edu/ted/

## Application Deadlines:

- Fall: August 1
- Spring: December 1
- Summer: June 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 for the written TOEFL
- 173 for the computer-based TOEFL
- 61 for the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## CERT-ITEC DEGREE REQUIREMENTS

```
Cert-ITEC Required Course (3 hours):
TED 8430 School Curriculum Planning
Cert-ITEC Electives (12 hours):
TED 8540 Intro to Technology Tools for
    Learning
```

| TED 8550 | Digital Multi-media in Learning | 3 |
| :--- | :--- | ---: |
| TED 8560 | Supporting Instructional Technology | 3 |
|  | Environments |  |
| TED 8570 | Internet in the Learning Process | 3 |
| TED 8580 | Collaboration Tools in the Learning <br>  <br> TED 8600 | 3 |
|  | Process <br> Advanced Seminar in Educational <br> Technology | $1-$ |
| TED 8620 | Advanced Support of Instructional | 3 |
|  | Technology Environments | 3 |
| TED 8770 | Integrating Technology into | 3 |
| EDAD 8250 | Instructional Design | Technology for School Leaders |

Total Credit Hours: 15

## CERTIFICATE IN INSTRUCTION IN URBAN SCHOOLS

## Department of Teacher Education, College of Education <br> Vision Statement

The Instruction in Urban Schools Certificate is designed to provide professionals in K-12 schools with historical, theoretical, research, and practical knowledge related to teaching and learning. This knowledge can be applied to all school settings, especially those with diverse student populations.

## Program Contact Information

Dr. Wilma Kuhlman, Graduate Program Chair (GPC) Roskens Hall (RH) 308
402-554-3926
wkuhlman@unomaha.edu
Program Website:
http://coe.unomaha.edu/ted/

## Application Deadlines:

- Fall: August 1
- Spring: December 1
- Summer: June 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IETLS, or PTE exam are required
- 500 for the written TOEFL
- 173 for the computer-based TOEFL
- 61 for the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## CERT-ITEC DEGREE REQUIREMENTS

Cert-INUS Required Courses (9 hours):
TED 8190 Contemporary Issues in Urban Education
TED $8180 \quad$ Culturally Responsive Teaching
TED 9200 Critical Pedagogy: Teaching for Social Justice
Cert-INUS Related Courses ( $\mathbf{9}$ hours):
Urban and diversity courses to be determined in consultation with program advisor (3 courses)
Total Credit Hours: 18
READING, M.S.

## Department of Teacher Education, College of Education

## Vision Statement

For candidates who hold a current teaching certificate, the Master of Science in Reading leads to eligibility for an added PK-12 Reading Endorsement. (The NE Dept. of Education also requires two years contracted teaching experience.)

The Master of Science in Reading focuses on reading pedagogy. During the program candidates will expand their knowledge in the following areas:

- Ability to apply research in reading and writing to teaching
- Skills for working with struggling readers and writers in PK-12 settings
- Leadership skills to work with students and their teachers in literacy
- Understanding components of students' diversity as readers and writers
- Using various types of literature to increase students' skills as readers and writers


## Program Contact Information

Dr. Wilma Kuhlman, Graduate Program Chair (GPC) Roskens Hall (RH) 308
402-554-3926
wkuhlman@unomaha.edu

## Program Website:

http://coe.unomaha.edu/ted/grad_reading.php

## Application Deadlines:

- Fall: August 1
- Spring: December 1
- Summer: June 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- An undergraduate GPA of 3.0 (on a 4.0 scale) or above in education; completion of undergraduate GPA deficiencies
- International students who do not expect to teach in the US may be eligible for admission. Please contact the program chair for more information.
- International students seeking admission to the graduate program must have a minimum TOEFL score of 550 (written), 213 (computer), or 79-80 (internet); or a minimum IELTS score of 7
- Candidates are admitted provisionally until completion and successful evaluation of the candidate's selective retention materials. Submitted materials are reviewed to determine if the candidate's status will be changed to unconditional. Unconditional status means the candidate is fully admitted to the program leading to a master's degree. Selective retention replaces the admission exam.


## MS-READ DEGREE REQUIREMENTS

MS-READ Required Courses ( 27 hours):
TED 9100 Theories and Processes of Reading
TED 9110 Principles and Practices for Teaching

| TED 9130 | Applications of Literacy Evaluation <br> and Instruction | 3 |
| :--- | :--- | :--- |
| TED 9140 | Assessment and Instruction for | 3 |
| TED 9180 | Secondary Readers | Seminar in Research in Reading |
| TED 8470 | Teaching the Language Arts | 3 |
| TED 8650 | Children's Literature and Education | 3 |
| TED 8660 | Young Adult Literature and <br> Education | 3 |

MS-READ Electives ( 9 hours unless developing a thesis):

These must be literacy-related courses, to be determined in consultation with the student's advisor.

If the thesis option is chosen, the student will only need three (3) hours of electives.

## MS-READ Exit Requirements:

## Comprehensive Exam

The comprehensive exam is a take-home exam. The questions require the student to integrate concepts from the graduate classes they have taken. Students will be asked to consider the relationships between theory, research and practice in issues related to literacy in school settings. Registration for the exam should be made the semester before graduation.

## Portfolio

The portfolio is a collection of materials that demonstrates who the student is as a reader, writer, teacher, and learner. It requires the student to reflect on issues related to their personal literacy and their development as a teacher. Similar to comprehensive exam, the portfolio requires the student to integrate issues from various classes they have taken, as well as their teaching experiences, theory, and research. Registration for the portfolio should be made the semester before graduation.

## Thesis

TED 8990 Thesis 1 -

The thesis is completed under the direction of a major advisor and supervisory committee. Thesis hours will be used as electives within the required 36 hours.

## MS-READ-Other Program-Related Information:

## Selective Retention

Candidates are admitted provisionally until completion and successful evaluation of their selective retention materials. Submitted materials are reviewed to determine if the candidate's status will be changed to unconditional. Unconditional status means the candidate is fully admitted to the program leading to a master's degree. Selective retention replaces the admission exam.

To move from provisional to unconditional status:

- During the term in which you will complete at least 12 hours of TED courses,
- Complete the Diversity Dispositions Index
- Submit a formal letter of application
- Complete a degree plan of study with an assigned advisor

The Master of Science in Reading provides an opportunity for graduate study in the field of Reading Education.
Candidates may select either a non-thesis program of study or a thesis program of study. Both options require candidates to successfully complete a minimum of 36 hours of graduate credit. A person may begin and complete a Master's in Reading before completing two (2) years of contracted teaching. However, two years of contracted teaching must be completed in order to receive a Nebraska reading endorsement (reading specialist). For further information, contact the department at (402) 5542212.

## Unclassified Students

Students who are not planning to pursue a program leading to a graduate certificate or a master's degree can be admitted to the Reading program with unclassified status. Candidates holding a previous master's degree in education who are seeking additional teaching endorsements may wish to choose an unclassified status. Unclassified students are allowed to take courses for which they meet the prerequisite. Successful completion of graduate courses as an unclassified student does not obligate the department to accept those courses for credit toward the fulfillment of degree requirements. Formal advisement in an endorsement area is required. Students admitted as unclassified are not eligible for financial aid.

Total Credit Hours: 36
SECONDARY EDUCATION, M.S.

## Department of Teacher Education, College of Education

## Vision Statement

The Secondary Education Graduate Program is committed to excellence in teaching and learning and is focused on providing our teachers with superior professional development opportunities. Our program offers teachers a custom program of study that allows them to pursue study in both content and pedagogy.

Our program is specifically designed to:

- Establish a strong tradition of scholarship in teaching and research-based practice
- Encourage the setting of high professional goals and standards of practice
- Establish an inclusive learning community, respecting diversity and individual differences
- Support the use of best practices in the University and P-12 classroom
- Assist the graduate teacher in becoming a dedicated practitioner, a reflective scholar and a responsible citizen through ongoing access to superior professional development


## Program Contact Information

Dr. Wilma Kuhlman, Graduate Program Chair (GPC)
Roskens Hall (RH) 308
402-554-3926
wkuhlman@unomaha.edu
Program Website:
http://coe.unomaha.edu/ted/

## Application Deadlines:

- Fall: August 1
- Spring: December 1
- Summer: June 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- An undergraduate GPA of 3.0 (on a 4.0 scale) or above in education
- International students who do not expect to teach in the US may be eligible for admission. Please contact the program chair for more information.
- International students seeking admission to this program must have a minimum TOEFL score of 550 (paper), 213 (computer-based), or 79-80 (internetbased); or a minimum IELTS score of 7
- Candidates are admitted provisionally until completion and successful evaluation of their selective retention materials. Submitted materials are reviewed to determine if the candidate's status will be changed to unconditional. Unconditional status means the candidate is fully admitted to the program leading to a master's degree. Selective retention replaces the admission exam.


## SEDMS DEGREE REQUIREMENTS

| SEDMS Required Courses (9 hours): |  |  |
| :--- | :--- | :--- |
| TED 8010 | Introduction to Research | 3 |
| TED 8060 | Current Issues and Trends in | 3 |
|  | Education |  |
| OR 8190 | OR |  |
|  | Contemporary Issues in Urban <br> Education | 3 |

One course in Diversity:
TED 8130 Language, Culture, and Power 3
TED 8210 Human Relations for Bias Free 3
Education
TED 8180 Culturally Responsive Teaching 3
TED 8800 Multicultural Literature for Children 3
and Youth
TED 9200 Critical Pedagogy: Teaching for

SEDMS Concentrations (9 hours):
See SEDMS Concentrations (p. 78)

## SEDMS Electives (18 hours):

Courses to be determined in consultation with program advisor.

## SEDMS Exit Requirements:

Comprehensive Examination OR

TED 8990
Thesis
1 6

Examinations are taken at or near completion of all coursework required in the approved plan of study. Registration for the exam should be made the semester before graduation.

The thesis is completed under the direction of a major advisor and supervisory committee. Thesis hours will be used as electives, and required hours for degree completion is 30 total hours.

Non-thesis Option: 36 hours

## SEDMS-Other Program-Related Information:

## Selective Retention

Candidates are admitted provisionally until completion and successful evaluation of their selective retention materials. Submitted materials are reviewed to determine if the candidate's status will be changed to unconditional. Unconditional status means the candidate is fully admitted to the program leading to a master's degree. Selective retention replaces the admission exam.

To move from provisional to unconditional status:

- During the term in which you will complete at least 9 hours of TED courses:
- Complete the Diversity Dispositions Index
- Submit a formal letter of application
- Complete a degree plan of study with an assigned advisor


## Unclassified Students

Students who are not planning to pursue a program leading to a graduate certificate or a master's degree can be admitted to Secondary Education with unclassified status. Candidates holding a previous master's degree in education who are seeking additional teaching endorsements may wish to choose an unclassified status. Unclassified students are allowed to take courses for which they meet the prerequisite. Successful completion of graduate courses as an unclassified student does not obligate the department to accept those courses for credit toward the fulfillment of degree requirements. Formal advisement in an endorsement area is required. Students admitted as unclassified are not eligible for financial aid.

NOTE: The master's degree in Secondary Education does not lead to initial teacher certification.

## SECONDARY EDUCATION, M.S. CONCENTRATIONS

## (9 hours):

Concentration courses to be selected from the listed options in consultation with the student's program advisor.

## ART CONCENTRATION

| Select a minimum of 9 credit hours from the courses <br> listed below: |  |  |
| :--- | :--- | ---: |
| ART | Special Studies in Art Education | 1 - |
| $8006 /$ ART |  | 3 |
| 4000 |  | 3 |
| ART | Cross-cultural Art History for | 3 |
| $8706 / A R T$ | Teachers |  |
| 4700 |  |  |

ART 8930
ART
8726/ART
4720
ART
8106/ART
8116/ART 4100/ART
4110
ART 8310
ART
8316/ART
4310
ART 8410
ART
8416/ART
4410
ART 8510
ART
8516/ART
4510
ART
8616/ART
4610
BILINGUAL EDUCATION CONCENTRATION

| Required: 6 hours |  |  |
| :---: | :---: | :---: |
| TED 8695 | Applying Reading \& Writing in Content Areas | 3 |
| TED 8130 | Language, Culture, and Power OR | 3 |
| SPCH | Intercultural Communication | 3 |
| $8536 / \mathrm{SPCH}$ 4530 |  |  |
| TED 8000 | Special Studies | - |
|  | OR |  |
| TED 8470 | Teaching the Language Arts | 3 |
| TED 8695, TED 8000: Courses taught in Spanish |  |  |
| Select a minimum of $\mathbf{3}$ hours from the list below: |  |  |
| TED | Special Methods in the Content Area | 3 |
| 8006/TED |  |  |
| 4000 |  |  |
| TED 8180 | Culturally Responsive Teaching | 3 |
| TED | Teaching of Writing Throughout the | 3 |
| 8616/TED | Curriculum |  |
| 4610 |  |  |
| TED 8800 | Multicultural Literature for Children and Youth | 3 |
| TED 8980 | Practicum: Various Content Areas | 1 - |
| TED 9100 | Theories and Processes of Reading | 3 |
| ENGL 8615 | Introduction to Linguistics | 3 |
| ENGL | Topics in Linguistics | 3 |


| 8696/ENGL |  |  |
| :---: | :---: | :---: |
| FLNG 8030 | Seminar: Second Language Acquisition Theory Other courses with advisor's approval | 3 |
| TED 8616: Course taught in Spanish |  |  |
| TED 8980: (deadline to apply is October 1) |  |  |
| EDUCATIONAL ADMINISTRATION CONCENTRATION |  |  |
| Required: 3 hours |  |  |
| EDAD 8030 | Introduction to Educational Leadership | 3 |
| Select a minimum of 6 hours from the courses listed below: |  |  |
| EDAD 8020 | Governance and Politics in Education | 3 |
| EDAD 8050 | School-Community Relations | 3 |
| EDAD 8490 | Leadership in Curriculum and Instruction | 3 |
| EDAD 8710 | Interpersonal Relationships in Educational Leadership | 3 |
| EDAD 9540 | School Law | 3 |
| EDAD 8450 | Middle School Leadership | 3 |
| EDAD 8470 | Administration and Supervision in Schools Other courses with advisor's approval | 3 |
| ENGLISH AS A SECOND LANGUAGE (ESL)/ENGLISH LANGUAGE LEARNERS (ELL) CONCENTRATION |  |  |
| Required: 6 hours |  |  |
| TED | Special Methods in the Content Area | 3 |
| 8006/TED |  |  |
| 4000 |  |  |
| TED 8130 | Language, Culture, and Power OR | 3 |
| ENGL | Sociolinguistics | 3 |
| $\begin{aligned} & \text { 8676/ENGL } \\ & 4670 \end{aligned}$ |  |  |
| TED 8055 | Foundations of English as a Second Language (ESL) <br> OR | 3 |
| ENGL 8615 | Introduction to Linguistics | 3 |

Select a minimum of $\mathbf{3}$ hours from the list below.
At least 6 hours in the concentration must have a TED prefix.

| TED 8140 | Spanish Language Arts | 3 |
| :--- | :--- | ---: |
| TED 8980 | Practicum: Various Content Areas | $1-$ |
|  |  | 6 |
| TED | Teaching of Writing Throughout the | 3 |

8616/TED Curriculum
4610
TED 8800
TED 9110

TED 8470
TED 8180
Culturally Responsive Teaching
Other courses with advisor's approval

## ENGLISH CONCENTRATION

Select a minimum of 9 credit hours from the courses listed below:
TED 8080 Storytelling and Education 3
TED Teaching of Writing Throughout the 3
8616/TED
4610
TED 8660

TED 8695

TED 8750

TED 8800

TED 9140
Young Adult Literature and Education
Applying Reading \& Writing in 3 Content Areas
Seminar in Literature for Children 3 and Young Adults Multicultural Literature for Children 3 and Youth
Assessment and Instruction for

Secondary Readers
Other courses with advisor's approval

TED 9140: (formerly TED 9120)

## FOREIGN LANGUAGES CONCENTRATION

Required Courses: 9 hours
French
FREN The Structure of French 3
8226/FREN
4220
FREN 8440 Seminar: French Composition 3
FREN 8000 Any 8000-level Literature course 3
Other courses with advisor's approval

## German

GERM
The Structure of German
8226/GERM
4220
GERM 8440
GERM 8000
Seminar: German Composition
Any 8000-level Literature course Other courses with the advisor's approval
Spanish
SPAN
8226/SPAN

| 4220 |  |
| :---: | :---: |
| SPAN 8440 | Seminar: Spanish Composition |
| SPAN 8000 | Any 8000-level Literature course |
|  | Other courses with the advisor's |
| IMPROVEMENT OF INSTRUCTION CONCENTRATION |  |
|  |  |
| Select a minimum of 9 credit hours from the courses |  |
| listed below: |  |
| TED 8070 | Teaching Multiple Intelligence |
| TED 8250 | Assessment for the Classroom |
|  | Teacher |
| TED 8300 | Effective Teaching Practices |
| TED | Teaching at the Middle School |
| 8396/TED |  |
| 4390/TED |  |
| 4390 |  |
| TED 8410 | Improvement of Instruction: Special Topics |
| TED | Teaching of Writing Throughout the |
| 8616/TED | Curriculum |
| 4610 |  |
| TED 8700 | Elementary Education Capstone |
|  | Course |
|  | Other courses with advisor's approval |
| TED 8410: (content varies) |  |
| MATHEMATICS CONCENTRATION |  |
| Required course: 3 hours |  |
| TED 8410 | Improvement of Instruction: Special Topics |
| Select a minimum of $\mathbf{6}$ credit hours from the courses |  |
| listed below: |  |
| TED 8550 | Digital Multi-media in Learning |
| TED | Aerospace Education Workshop |
| 8510/AVN |  |
| 8510 |  |
| TED 8100 | Research Project |
| TED 8970 | Independent Study |
|  | Other courses with the advisor's approval |

TED 8100, TED 8970: (Mathematics Education)

## MIDDLE LEVEL CONCENTRATION

## Required: 6 hours

TED Introduction to the Middle School 3
8376/TED
4370/TED
4370
TED
Teaching at the Middle School
Other courses with the advisor's approval

8396/TED
4390/TED
4390

Select a minimum of $\mathbf{3}$ hours from the courses listed below:
TED 8070 Teaching Multiple Intelligence 3
TED 8250 Assessment for the Classroom 3
Teacher
TED 8300 Effective Teaching Practices 3
COUN 8010 Teaching Models in Affective 3
Education
Other courses with advisor's approval
MUSIC CONCENTRATION

## Required: 3 hours

MUS 8610 Organization and Administration in 3
Music
OR
MUS 8620 Seminar-Workshops in Music 1 -
Education
Both classes are offered on a rotating basis
Select a minimum of $\mathbf{6}$ hours from the courses listed below:
MUS Special Studies in Music 1-
8006/MUS 3
4000
MUS Renaissance Music Literature 3
8546/MUS
4540
MUS Baroque Music Literature 3
8556/MUS
4550
MUS
8566/MUS
4560
MUS
8586/MUS
4580
MUS 8446 Music Since 1945
MUS 8660 Pedagogy of Theory 3
MUS 8640 Foundations of Music Education
Other courses with the advisor's approval

## SCIENCE CONCENTRATION

Required course: $\mathbf{3}$ hours
$\begin{array}{ll}\text { TED } 8420 & \begin{array}{l}\text { Trends and Teaching Strategies in } \\ \text { Science Education }\end{array}\end{array}$
Select a minimum of 6 hours from the courses listed
below or courses with advisor's approval:
TED 8300 Effective Teaching Practices 3
TED 8250 Assessment for the Classroom 3

| Teacher |  |  |
| :---: | :---: | :---: |
| TED | Aerospace Education Workshop | 3 |
| 8510/AVN |  |  |
| 8510 |  |  |
| TED 8550 | Digital Multi-media in Learning | 3 |
| TED 8100 | Research Project | 1 - |
| TED 8970 | Independent Study |  |
|  |  | 3 |
| TED 8100, TED 8970: (Science Education) |  |  |
| SCHOOL LIBRARY CONCENTRATION (NONTHESIS OPTION ONLY) |  |  |
| Required: 21 hours |  |  |
| TED 8710 | Reference Resources and Services | 3 |
| TED | Cataloging and Classification | 3 |
| 8746/TED |  |  |
| 4740 |  |  |
| TED 8760 | Managing Collections in Libraries and Information Agencies | 3 |
| TED 8660 | Young Adult Literature and | 3 |
|  | Education |  |
| TED | Special Libraries and Information | 3 |
| 8726/TED | Agencies |  |
| 4720 ( |  |  |
| TED 8650 | Children's Literature and Education | 3 |
| TED | Leadership and Management in | 3 |
| 8806/TED | Libraries and Information Agencies |  |
| 4800 ( |  |  |
|  | Other courses with advisor's |  |
| SOCIAL STUDIES CONCENTRATION |  |  |
| 9 hours in the Social Sciences in consultation with your academic advisor |  |  |
| TECHNOLOGY CONCENTRATION |  |  |
| 9 hours to be determined in consultation with your academic advisor |  |  |
| URBAN SCHOOLS CONCENTRATION |  |  |
| Required: 9 hours |  |  |
| TED 8190 | Contemporary Issues in Urban | 3 |
|  | Education |  |
| TED 8180 | Culturally Responsive Teaching | 3 |
| TED 9200 | Critical Pedagogy: Teaching for Social Justice | 3 |
| In addition, students must choose 3 hours from the list below: |  |  |
| TED 8800 | Multicultural Literature for Children and Youth | 3 |
| UBNS | Race, Ethnicity and American Urban | 3 |
| 8020/BLST | Culture |  |
| 8020 |  |  |

- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International student applicants score at least 600 on the paper-based TOEFL examination, 250 on the computer-based TOEFL, or 100 on the internet-based TOEFL in order to be eligible for unconditional admission.
- Statement of Purpose
- The statement (of about 500-1000 words) should convey the applicant's previous study in the field of English, any relevant work or life experience, the applicant's philosophy of learning and reason for pursuing a Master's degree in English, and anything else that might help convey the applicant's personality, spirit, or intellectual character.
- To be admitted to graduate study in English, a student should have completed at least 19 credit hours in undergraduate English courses above the freshman level with an average grade of " $B$ " ( 3.0 on a 4.0 scale) or higher.
- The application for a teaching assistantship requires the following additional materials, which should all be sent directly to Dr. Tracy Bridgeford, Graduate Program Chair, Department of English, 192D ASH, University of Nebraska at Omaha, 6001 Dodge St., Omaha, NE 68182-0175 . Although less ideal, application materials may also be sent as email attachments to tbridgeford@unomaha.edu.
- Application coversheet (available online at www.unomaha.edu/english/grad.php)
- Statement of Purpose : 500-1000 words detailing the applicant's ambitions in the graduate program and his or her motivation for pursuing the teaching assistantship. In addition, this statement should convey some sense of the applicant's identity and philosophy of learning.
- Writing Sample of academic prose by the applicant of 10 or more pages in length, preferably a paper demonstrating research. This sample may not be a work of fiction or poetry.
- Three Letters of Recommendation from past teachers or anyone else reasonably able to offer an objective assessment of the applicant's writing, critical reasoning skills, and promise as a teacher. These letters should be sent to the above address directly by the recommenders, along with waiver forms.
- Either Graduate Record Exam (GRE) scores or Miller Analogies Test (MAT) scores sent directly to UNO from the testing entities.


## MA-ENGL DEGREE REQUIREMENTS

## MA-ENGL Required Courses:

ENGL 8010 Seminar: Literary Research
Depending on which option is chosen (thesis or nonthesis), select $9-15$ hours ( $\mathbf{3 - 5}$ courses) from the following list:
ENGL American Poetry
8026/ENGL
4020
ENGL Contemporary Poetry of England 3
8046/ENGL
4040
ENGL
8066/ENGL 4060
ENGL The American Drama
8086/ENGL
4080
ENGL 8100 Seminar: Topics in American 3
ENGL American Literary Realism and 3
8146/ENGL
4140
ENGL 8150
ENGL 8160
Seminar: Theodore Roethke's Poetry

ENGL
8166/ENGL
4160
ENGL 8180

ENGL
8186/ENGL
4180
ENGL 8200
ENGL
8236/ENGL
4230
ENGL 8250
ENGL
8256/ENGL
4250
ENGL
8266/ENGL
4260
ENGL 8276
ENGL 8300
ENGL
8316/ENGL
4310
ENGL
8326/ENGL
4320
ENGL

Seminar: Contemporary American 3
Poetry
Major Movements in Contemporary
Literature
Seminar: Middle English Literature Latino Literature

Seminar: Chaucer
Introduction to Women's Studies in Literature

Women of Color Writers

Women Writers of the West
Seminar: Shakespeare
Middle English Literature

Chaucer

Sixteenth Century Literature

| $\begin{aligned} & \text { 8336/ENGL } \\ & 4330 \end{aligned}$ |  |  |
| :---: | :---: | :---: |
| ENGL | Shakespeare | 3 |
| 8346/ENGL |  |  |
| 4340 |  |  |
| ENGL | Shakespeare's Contemporaries | 3 |
| 8356/ENGL |  |  |
| 4350 |  |  |
| ENGL | Seventeenth Century Literature | 3 |
| 8366/ENGL |  |  |
| 4360 |  |  |
| ENGL | Restoration and Eighteenth Century | 3 |
| 8376/ENGL | Literature |  |
| 4370 |  |  |
| ENGL | The Eighteenth Century English | 3 |
| 8386/ENGL | Novel |  |
| 4380 |  |  |
| ENGL 8396 | Medieval Celtic Literature | 3 |
| ENGL 8400 | Seminar: English Renaissance | 3 |
| ENGL | Literature of the Romantic Period | 3 |
| 8416/ENGL |  |  |
| 4410 |  |  |
| ENGL | Literature of the Victorian Period | 3 |
| 8426/ENGL |  |  |
| 4420 |  |  |
| ENGL 8473 |  | 3 |
| ENGL 8450 | Seminar: John Milton | 3 |
| ENGL | The Twentieth Century English | 3 |
| 8466/ENGL | Novel |  |
| 4460 |  |  |
| ENGL | Twentieth Century English | 3 |
| 8486/ENGL | Literature |  |
| 4480 |  |  |
| ENGL 8500 | Seminar: Restoration and Eighteenth | 3 |
|  | Century |  |
| ENGL 8600 | Seminar: Nineteenth-Century | 3 |
|  | English Literature |  |
| ENGL 8615 | Introduction to Linguistics | 3 |
| ENGL 8620 | Seminar: Jane Austen | 3 |
| ENGL | History of English | 3 |
| 8626/ENGL |  |  |
| 4620 |  |  |
| ENGL | Structure of English | 3 |
| 8656/ENGL |  |  |
| 4650 |  |  |
| ENGL | Sociolinguistics | 3 |
| 8676/ENGL |  |  |
| 4670 |  |  |
| ENGL 8680 | Seminar: Workshop in Tom | 3 |
|  | Stoppard's Plays |  |
| ENGL | Topics in Linguistics | 3 |
| 8696/ENGL |  |  |
| 4690 |  |  |
| ENGL | Rhetoric | 3 |
| 8736/ENGL |  |  |


| 4730 |  |  |
| :---: | :---: | :---: |
| ENGL 8740 | Seminar: Discourse, Culture, and Power | 3 |
| ENGL | Composition Theory and Pedagogy | 3 |
| 8756/ENGL |  |  |
| 4750 |  |  |
| ENGL | Seminar in Popular Culture, Mass | 3 |
| 8760/COMM | Media and Visual Rhetoric |  |
| 8200 |  |  |
| ENGL 8780 | Pedagogic Field Experience in TESOL | 3 |
| ENGL | English Career Preparation | 1 |
| 8796/ENGL |  |  |
| 4790 |  |  |
| ENGL 8800 | Seminar: Topics in English | 3 |
|  | Language and Literature |  |
| ENGL 8806 | English Internship | - |
| ENGL 8816 | Digital Literacies for Technical Communicators | 3 |
| ENGL 8826 | Autobiography | 3 |
| ENGL | Technical Communication | 3 |
| 8836/ENGL |  |  |
| 4830/JOUR |  |  |
| 4830/JOUR |  |  |
| 8836 |  |  |
| ENGL | Travel Writing | 3 |
| 8846/ENGL |  |  |
| 4840 |  |  |
| ENGL 8850 | Sem: Spiritual Nonfiction | 3 |
| ENGL | Information Design for Technical | 3 |
| 8856/ENGL | Communicators |  |
| 4850/JOUR |  |  |
| 4850/JOUR |  |  |
| 8856 |  |  |
| ENGL | The Modern Familiar Essay | 3 |
| 8866/ENGL |  |  |
| 4860 |  |  |
| ENGL 8870 | Seminar: Publishing Non-Fiction | 3 |
| ENGL 8876 | Technical Editing | 3 |
| ENGL 8880 | Advanced Placement Institute: | 3 |
|  | English \& Compositions |  |
| ENGL | Community Service Writing | 3 |
| 8886/ENGL |  |  |
| 4880 |  |  |
| ENGL 8890 | Sem: Experiments in Creative | 3 |
|  | Nonfiction |  |
| ENGL | Capstone Course in Technical | 3 |
| 8896/ENGL | Communication |  |
| 4890/JOUR |  |  |
| 4890/JOUR |  |  |
| 8896 |  |  |
| ENGL 8900 | Independent Study | 1 - |
| ENGL 8910 | Seminar: Critical Theory | 3 |

ENGL 8926 Great Characters 3
ENGL
8946/ENGL
4940
ENGL
8966/ENGL
4960
Depending on which option is chosen (thesis or nonthesis), select 12-18 hours (4-6 courses) from the following list:
ENGL 8100 Seminar: Topics in American 3 Literature
ENGL 8200 Seminar: Middle English Literature
ENGL 8400 Seminar: English Renaissance 3
ENGL 8500 Seminar: Restoration and Eighteenth Century
ENGL 8600 Seminar: Nineteenth-Century English Literature
ENGL 8800 Seminar: Topics in English
Language and Literature
ENGL 8900 Independent Study
ENGL 9120
These English seminars vary in emphasis and may be repeated for credit.
MA-ENGL Exit Requirements:

## Thesis Option:

Comprehensive Examination
Thesis
ENGL 8990 Thesis 3-

## Successful completion of $\mathbf{2 4}$ hours of coursework

Including at least 12 hours in seminar-level courses; plus a thesis ( 6 hours) on an approved topic accepted after an oral defense before a faculty committee; plus a comprehensive written examination over a designated body of literature prepared and judged by a faculty committee.

## Non-Thesis Option:

## Comprehensive Examination

## Successful completion of $\mathbf{3 6}$ hours of coursework

Including at least 18 hours in seminar-level courses; plus a comprehensive written examination over a designated body of literature or language prepared and judged by a faculty committee.

## TOTAL CREDIT HOURS:

Thesis Option: 30 hours Non-Thesis Option: 36 hours

## Coursework outside English:

With the approval of the student's advisor and the English Graduate Program Committee, a student may include a
minor or coursework from another related discipline or disciplines as part of the Plan of Study. For both the thesis and non-thesis options, a minor is 9 hours ( 3 courses). The maximum amount of coursework that may be applied from another discipline or disciplines is the same as that for a minor in both options ( 9 hours).

## ADVANCED WRITING CERTIFICATE

## Department of English, College of Arts \& Sciences

## Vision Statement

The Graduate Certificate in Advanced Writing is designed for students interested in becoming more expressive, powerful writers of nonfiction prose. Students interested in securing publication of their writing are mentored in the publication process by the faculty.

The Advanced Writing Certificate is designed for the following students:

- Writers interested in developing and publishing their creative nonfiction;
- Graduate students in English and related fields;
- Educators seeking writing-specific training and credentials;
- Working professionals who either are currently employed or will be seeking employment as experts in written communication;
- Individuals who work in community service organizations;
- Individuals dedicated to cultural activities in the community.


## Program Contact Information:

Dr. Tracy Bridgeford, Graduate Program Chair (GPC) Arts \& Science Hall (ASH) 192
402-554-3312
tbridgeford@unomaha.edu

## Program Website:

http://www.unomaha.edu/english/grad.php

## Application Deadlines:

Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Applicants must have completed a baccalaureate degree in English, or a related degree, with at least a 3.0 (on a 4.0 scale) GPA
- Statement of Purpose (letter of intent)
- The statement (of about 500-1000 words) should convey the applicant's interest in creative nonfiction, previous study in the field of English, any relevant work or life experience, reason for pursuing a graduate certificate in Advanced Writing, and anything else that might help convey the applicant's personality, spirit, or intellectual character.
- If the applicant has been admitted to the MA in English program, an application fee and transcripts are not required.


## CERT-ADWR DEGREE REQUIREMENTS

## Cert-ADWR Required Core Courses (9 hours):

Select 9 hours ( 3 courses) from the courses listed below:
ENGL 8826 Autobiography 3
ENGL Travel Writing 3
8846/ENGL
4840
ENGL The Modern Familiar Essay
8866/ENGL
4860
ENGL Topics in Language and Literature
8966/ENGL
4960
ENGL 8850
ENGL 8870
Sem: Spiritual Nonfiction

ENGL 8890 Sem: Experiments in Creative Nonfiction

Cert-ADWR Electives ( 6 hours):
Select 6 hours ( 2 courses) from the courses listed below:
ENGL 8800 Seminar: Topics in English
ENGL 8806 English Internship

ENGL 8816 Digital Literacies for Technical 3 Communicators
ENGL Technical Communication
8836/ENGL
4830/JOUR
4830/JOUR
8836
ENGL 8876 Technical Editing
ENGL 8806: with the University of Nebraska Press or other approved venue

## Education:

| TED 8410 | Improvement of Instruction: Special | 3 |
| :--- | :--- | :--- |
|  | Topics |  |
| TED | Teaching of Writing Throughout the | 3 |
| 8616/TED | Curriculum |  |
| 4610 |  |  |

## Public Administration:

PA 8520 Seminar in Grant Writing

## Cert-ADWR Exit Requirements:

## Portfolio Requirement

Students will assemble a portfolio representing their achievement in the five courses ( 15 hours) applied toward the Advanced Writing Certificate. The portfolio will contain at least one writing sample from each course and will be reviewed by the student's advisor and one other graduate faculty member involved in offering courses approved for the Advanced Writing Certificate. As part of the portfolio requirement, each student will make an oral presentation to the reviewing professors. The website for the Advanced Writing Graduate Certificate contains a detailed description of the portfolio requirement and the deadlines for submission:
www.unomaha.edu/english/cert.php.
Total Credit Hours: 15
*** Technical-Communication-Certificate ***

## TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES CERTIFICATE

Department of English, College of Arts \& Sciences

## Vision Statement

The Department of English offers students the opportunity to obtain a Certificate in Teaching English to Speakers of Other Languages. Completion of these requirements does not certify a graduate to teach in Nebraska public schools. Instead, it is an academic credential meant for teachers already certified in other areas, for people who plan to teach in venues other than public schools, and for anyone who works in some capacity with non-native speakers of English.

## Program Contact Information:

Dr. Tracy Bridgeford, Graduate Program Chair (GPC)
Arts \& Science Hall (ASH) 192
402-554-3312
tbridgeford@unomaha.edu

## Program Website:

http://www.unomaha.edu/english/grad.php

## Application Deadlines:

Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Bachelor's degree with a major or minor in one of the following areas: English or foreign language teaching field, English, a foreign language, or the equivalent. Students with degrees in other fields should contact the English Graduate Program Director at 402-554-2635.
- All students whose language of nurture is not English must demonstrate oral and written mastery of English as certified by the Department of English. The Department of English requires non-native speakers of English to have a TOEFL score of 600 (paper-based), 250 (computer-based), or 100 (internet-based) to be eligible for conditional admission.
- If an applicant has been admitted to the MA in English, an application fee and transcripts are not required.


## CERT-TESL REQUIREMENTS

Cert-TESL Required Courses:
ENGL 8615 Introduction to Linguistics

ENGL Structure of English
8656/ENGL
4650
ENGL Topics in Linguistics 3
8696/ENGL
4690
TED Special Methods in the Content Area
8006/TED
4000
ENGL Topics in Linguistics 3
8696/ENGL
4690
ENGL Sociolinguistics 3
8676/ENGL
4670
The Linguistics faculty strongly recommends that all TESOL certificate students achieve oral and written proficiency in a second language.

Students may not repeat any courses already taken at the undergraduate level.
Students may substitute up to three required courses with a course from the approved list below.

TESOL Certificate students must obtain permission for substitutions from the Director for TESOL Certificates.
ENGL Topics in Linguistics
8696/ENGL
4690
ENGL 8740 Seminar: Discourse, Culture, and 3
ENGL Composition Theory and Pedagogy 3
8756/ENGL
4750
FLNG 8020 Seminar: FL/TESOL Research 3
FLNG 8030 Seminar: Second Language 3
Acquisition Theory
FLNG 8040 Seminar: Assessment \& Curriculum 3
Design
TED 8250 Assessment for the Classroom
Teacher
ENGL 8696: (one course from approved topics)
ENGL 8756: (in place of ENGL 800 TA Seminar)
Or one of the following:
ENGL 8816 Digital Literacies for Technical Communicators
ENGL Technical Communication

8836/ENGL
4830/JOUR
4830/JOUR
8836

## TED Elective in Instructional Technology:

| one course from: |  |  |
| :--- | :--- | :--- |
| TED 8540 | Intro to Technology Tools for | 3 |
|  | Learning |  |
| TED 8550 | Digital Multi-media in Learning | 3 |
| TED 8560 | Supporting Instructional Technology | 3 |
|  | Environments | 3 |
| TED 8570 | Internet in the Learning Process | 3 |
| TED 8580 | Collaboration Tools in the Learning | 3 |
|  | Process | 3 |
| TED 8770 | Integrating Technology into | 3 |

Total Credit Hours: 15
Exercise Science

## EXERCISE SCIENCE, PH.D.

## School of Health, Physical Education \& Recreation, College of Education

## Vision Statement

The doctoral degree in Exercise Science at the University of Nebraska at Omaha (UNO) is based on the physiology, biochemistry, biophysics, motor control and development, and biopsychosociology of human movement. The program is aimed at improving movement function and physical activity level using evidence-based approaches through interdisciplinary clinical and translational research. A problem-solving approach is used across the age and health spectrum for disease prevention, health enhancement, physical rehabilitation, and exercise motivation.

In the last decade 237 students were awarded the Master of Science or Master of Arts Degrees in HPER with a Concentration in Exercise Science. Faculty in the School of HPER have generated numerous peer-reviewed publications, and acquired more than 9 million dollars of external funding from the National Institute of Health, American Heart Association, National Aeronautics and Space Agency, US Department of Education, Nebraska Research Initiative, American Geriatrics Society, and several other state and national foundations. UNO faculty have been aggressive and entrepreneurial in establishing collaborative relationships within the University and with partners at the University of Nebraska Medical Center, the University of Nebraska at Lincoln, Creighton University, and other community organizations. Two HPER faculty have received the Graduate Mentor of the Year Award, four have received the UNO Teacher of the Year Award, and two have received the Outstanding Research and Creative Activity Award. In 2009 the UNO Chancellor's Strategic Planning Award in the area of Academic Excellence was awarded to our Nebraska Biomechanics Core Facility. One of our post-doctoral research associates
was the first in the State of Nebraska to receive a prestigious K99/R00 award from the National Institutes of Health.

Many of our Masters students, upon graduating, have expressed the desire to continue their education in pursuit of the $\mathrm{Ph} . \mathrm{D}$. degree. We have had numerous requests from students in Nebraska, as well as outside the state, interested in pursuing a doctoral degree with our faculty. Several of our faculty have advised and funded Ph.D. candidates in the UNL Psychology, UNL Biomedical Engineering, and UNMC Medical Sciences Interdepartmental Area (MSIA) programs. This is perhaps the most compelling evidence of the demand for this program. The fact that well qualified students have been attracted to studying with UNO faculty suggests that the new program will be able to attract a strong pool of applicants.

There is no other Ph.D. program specifically in Exercise Science offered in the state. The only other similar Ph.D. program existing in the state is a $\mathrm{Ph} . \mathrm{D}$. program at the University of Nebraska at Lincoln in Exercise Physiology and Nutrition. However, this program is distinctly different than our proposed program. The UNL program is sportoriented and emphasizes the study of muscle function in strength training, sport nutrition supplements, and growth and development of athletes. Our program is clinically oriented and more comprehensive within the discipline of exercise science as it includes very different tracks than the UNL program. These tracks include biomechanics and motor development/control, as well as exercise physiology and physical activity. They reflect the considerable faculty expertise within the School of HPER in these areas. Also, the exercise physiology specialization in our program is broader than that at UNL because it will allow study in a variety of clinically oriented areas including cellular, cardiovascular, metabolic, and special populations (e.g., obesity; diabetes; osteoporosis). Consequently, our program is considerably broader and will allow students to emphasize clinical and new areas of the discipline not addressed in the UNL program. Importantly, our program has the support of the UNL faculty associated with their degree.

The absence of a clinically-oriented Ph.D. program in Exercise Science in Nebraska has resulted in numerous students leaving the state. The financial loss to the state is considerable because these students leave the region to pursue a terminal degree and often do not return. This drain of intellectual talent has financial repercussions in that the metropolitan area, state, and region lose the stimulating impact they have on the economy. It is clear this Ph.D. in Exercise Science provides Nebraska students with the opportunity to get a terminal degree in Nebraska, thereby preventing the loss of these high quality students to other states.

The purpose of the program is to provide the state and region with cutting-edge exercise science professionals
with the advanced training to meet rapidly increasing job demands. The national epidemic in obesity and diabetes, as well as the rapidly increasing aging population of our state and nation, has increased employment opportunities for persons with advanced degrees in the discipline. Such positions include:

- Clinical exercise physiologists, clinical biomechanists and motor control specialists in hospital-based programs dealing with gait dysfunction, movement disabilities, cardiovascular disease, osteoporosis, obesity, and diabetes.
- Leadership and technical positions in the business sector to implement health and wellness programs.
- Researchers and scientists in area hospitals and universities addressing a variety of topics ranging from pathological gait analysis to infant motor disabilities and to education training for robotic surgery and simulation.
- Scientists in clinical translational research environments.
- University faculty.

Professionals in the area who are clinical physical therapists, athletic trainers, and even physicians will be strongly attracted to this program to obtain a Ph.D. Furthermore, our Ph.D. program addresses several of the Critical Success Factors that were included in the strategic plan of the UNMC Chancellor, highlighting the intercampus appeal of our Ph.D. program. Specifically, our graduates will provide clinical and translational research that should lead to significant NIH funding. They will accelerate growth in clinical research in geriatrics, will provide the research backbone for the Home Instead Center for Successful Aging, and will advance partnerships among campuses for health. Importantly, we believe that the development of these new graduates will generate biomedical technologies that will promote economic development in Nebraska by improving science and clinical care, and stimulating new business development in the state. The importance of stimulating economic growth in the state was addressed by the President of the University of Nebraska in his last President's Society speech.

## Program Contact Information:

Dr. Nicholas Stergiou, Graduate Program Chair (GPC) Health Physical Education \& Recreation (HPER) 207Q 402-554-3247
nstergiou@unomaha.edu

## Program Website:

http://coe.unomaha.edu/hper/

## Application Deadlines:

Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- GPA of 3.2 in Master's program or in the last 30 hours of previous graduate work
- Master's degree, or minimum of 30 graduate hours in a related field, e.g., health, physical therapy
- For applicants whose native language is not English, a minimum total score of 80 on the internet-based TOEFL is required, with a score of at least 20 in all categories (listening, reading, writing, and speaking)
- GRE Score:
- Total score (verbal and quantitative) of at least 1000 if GRE was taken before August 2011; total score (verbal and quantitative) of at least 297 if GRE was taken after August 2011. Exam and scores must have been taken within the last three (3) years.
- Three (3) Letters of Recommendation
- Statement of Purpose:
- Needs to state goals and objectives for seeking the degree. Students will identify their intended area of focus and the name of the faculty advisor with whom they wish to work (maximum 500 words).
- Writing Sample:
- If any scientific papers were published with the student's name listed first among authors, then they should be submitted.
- Resume
- Undergraduate Course Deficiencies: these courses must be taken before the applicant can begin doctoral study if they or their equivalent have not already been included in the applicant's previous course(s) of study.
- Biomechanics Track: Anatomy \& Physiology; Exercise Physiology; Biomechanics; Laboratory Methods in HPER; Calculus I, II, \& III; Linear or Matrix Algebra; Differential Equations; Introduction to Computer Programming; Introduction to Computer Science, Engineering Statics; Engineering Dynamics; Strength of Materials; Classical Mechanics.
- Motor Development and Control Track: Anatomy \& Physiology; Exercise Physiology; Biomechanics; Laboratory Methods in HPER; Calculus I, II, \& III; Linear or Matrix Algebra; Differential Equations; Introduction to Computer Programming; Introduction to Computer Science; Perception
- Exercise Physiology Track: Anatomy \& Physiology, Exercise Physiology, Biomechanics, and Laboratory Methods in HPER.
- Physical Activity Track: Anatomy \& Physiology, Exercise Physiology, and Laboratory Methods in HPER.
- Approval by a faculty member willing to act as advisor and mentor to the student. The applicant is expected to contact a potential advisor to determine if a suitable match in interests exists. This assures that the student will be able to develop a program of study that meets the specific goals intended.


## PHD-EXS DEGREE REQUIREMENTS

## PHD-EXS Required Courses ( 21 hours):

If HPER 8030 and PE 8040 (or equivalent courses) have previously been taken, additional research core courses must be taken in order to meet the 21 -hour requirement.
HPER 8030 Research in Health, Physical
Education and Recreation
PE 8040 Applied Statistics in Physical
Education
HPER 8100 Research Project 1 -

HPER 8100: (minimum 15)
This seminar is designed to enhance success in academia and maximize the student's research experiences. The student will be required to register for 3 credit hours per semester. In these credit hours the student will attend formal reading clubs with the advisor where he/she will be engaged in reviewing the related literature via journal articles, conducting research projects, reviews of literature, meta-analyses, etc. In addition, the student will be taught how to write successful grants and develop a successful line of research. Each semester the student will have to
produce as the graded outcome a manuscript based on data acquired in the laboratory from the ideas developed in the seminar or submit a grant that will support the research ideas developed. Ethical training will be offered as part of the seminar hours. In their first semester, all doctoral students will be required to attend a training session on scientific integrity and the responsible conduct in research. A complementary, mandatory, web-based component will be completed before the didactic material. This component is offered through the UNMC IRB office and provides an extensive literature-based review of the topics, allowing interactive "chat-room" discussion of a series of relevant case-based problems.

## PHD-EXS Concentrations (24 hours):

See Exercise, Ph.D. Concentrations (p. 90)

## PHD-EXS Exit Requirements:

Comprehensive Examination
Dissertation

## PHD-EXS-Other Program-Related Information:

- Advisor and Supervisory Committee
- Preliminary contact is made with a potential advisor prior to applying to the program. Once admitted, a student is assigned an advisor based on the match in interests with those of the advisor.
- After admission to the Graduate College, but before half of the hours for the degree are completed, the student must form a Supervisory Committee. It should consist of at least three Exercise Scienceaffiliated faculty members, one of whom must be from a department different than that of the dissertation advisor. The Dean of Graduate Studies at UNO will appoint the committee upon recommendation of the advisor. The committee will be responsible for approving the program of study and the dissertation and its oral defense.
- Program of Study
- The student and his/her advisor will determine the Program of Study, including the required courses and general area of research for the dissertation. The advisor will then file a report of this information with the Graduate Studies Office.
- Comprehensive Exam
- The required comprehensive exam will be taken in the final semester of coursework. The Supervisory Committee, in conjunction with the student, will determine the nature of the exam; the exam will be a take-home exam followed by an oral defense, or writing an NIH-type grant followed by an oral exam. The Supervisory Committee will evaluate the exam.
- Dissertation
- After successfully completing the comprehensive exam and being admitted to degree candidacy, the student must register for at least one credit hour of dissertation for each semester until completion of the degree. A minimum of 15 hours of dissertation credit must be completed within the course of the degree.
- Within one year of successfully completing the comprehensive exam and being admitted to candidacy, a formal written research proposal for the dissertation topic should be presented to the Dissertation Committee, which will include an oral defense. It is expected that the proposal will result in at least three submissions in refereed journals in the discipline.
- Candidacy
- The student is admitted to candidacy after successful completion of the comprehensive exam and filing of this information in the Office of Graduate Studies. The term of candidacy is limited to three years. The Ph.D. degree must be completed within seven years from the date of initial registration as a Ph.D.-seeking student.
- Residency
- The residency will be reasonably compact, continuous, and coherent, and a substantial portion done at and under the close supervision of the University. Most of the students in the program will be full-time and continuously enrolled.
Total Credit Hours: 60
EXERCISE, PH.D. CONCENTRATIONS
(24 hours):


## PHYSIOLOGY OF EXERCISE CONCENTRATION

| Required Courses (15 hours): |  |  |
| :--- | :--- | ---: |
| PE 8950 | Advanced Exercise Physiology | 3 |
| HPER 8850 | Exercise for Special Populations | 3 |
| CIP 806 | Graduate Physiology |  |
| CIP 916 | Cardiopulmonary Function in Health <br> and Disease |  |
| BRTP 823 | Molecular Cell Biology |  |
| UNMC: CIP 806, CIP 916, BRTP 823 |  |  |
| Electives (9 hours): |  |  |
| PE 8460 | Occupational Biomechanics | 3 |
| PSYC | Hormones \& Behavior |  |
| 8326/PSYC |  | 3 |
| 4320/BIOL |  |  |
| 4320/BIOL |  |  |

8326
PSYC
8276/BIOL
4270/PSYC
4270/BIOL
8276
BIOC 827 Metabolic Regulatory Mechanisms
ENV 812 Chronic Disease Prevention and

ENV 821 Epidemiology: Advanced Methods 3

CIP 920 Ion Channels and Disease
GCBA 812 Human Neuroanatomy 3
GCBA 823 Fundamentals in Genetics 3
GCBA 826 Human Histology 3
GCBA 910 Human Gross Anatomy I 3
GCBA 920 Human Gross Anatomy II 3
GCBA 922 Neurobiology 3
PE 9810 Higher Education Teaching Seminar
PE 9820

Control

CIP 914 Reproductive Endocrinology
Animal Behavior

Service Experience in Higher Education

UNMC: BIOC 827, ENV 812, ENV 821, CIP 914, CIP 920, GCBA 812, GCBA 823, GCBA 826, GCBA 910, GCBA 920, GCBA 922

## BIOMECHANICS CONCENTRATION

## Required Courses ( 15 hours):

PE 8450 Advanced Biomechanics 3
PE 8460 Occupational Biomechanics 3
PE $8410 \quad$ Motor Control 3
CSCI 8325 Data Structures 3
MATH 8400 Dynamical Systems and Chaos 3
Electives (9 hours):
PE 8400 Motor Learning 3

CSCI Introduction to Artificial
8456/CSCI Intelligence
4450
CSCI 8476 Pattern Recognition 3
CSCI Advanced Numerical Methods I 3
8500/MATH
8500
CSCI 8400 Advanced Computer Graphics 3
CSCI Advanced Numerical Methods II 3
8510/MATH
8510
CSCI Computer Graphics
8626/CSCI
4620
GCBA 812 Human Neuroanatomy 3
MATH 8250 Partial Differential Equations 3
MATH Deterministic Operations Research
8306/MATH Models

4300/CSCI

| 8306/CSCI |  |  | MATH | Deterministic Operations Research | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4300 |  |  | 8306/MATH | Models |  |
| MATH 8316 | Probabilistic Operations Research | 3 | 4300/CSCI |  |  |
|  | Models |  | 8306/CSCI |  |  |
| MATH 8370 | Fuzzy Set Theory and Operations | 3 | 4300 |  |  |
|  | Research |  | MATH 8316 | Probabilistic Operations Research | 3 |
| MATH 8766 | Topics in Modeling | 3 |  | Models |  |
| MATH 9110 | Advanced Topics in Applied | 3 | MATH 8370 | Fuzzy Set Theory and Operations | 3 |
|  | Mathematics Advanced General Pediatrics | 3 | MATH 8766 | Research Topics in Modeling | 3 |
| PHYT 942 | Special Topics in Pediatric Physical | 3 | MATH 9110 | Advanced Topics in Applied | 3 |
|  | Therapy |  |  | Mathematics |  |
| PSM 806 | Biostatistics I |  | PEDS 913 | Advanced General Pediatrics | 3 |
| PSM 808 | Biostatistics II |  | PHYT 942 | Special Topics in Pediatric Physical | 3 |
| PSYC 9010 | Proseminar: Statistical Methods I | 3 |  | Therapy |  |
| PSYC 9020 | Proseminar: Statistical Methods II | 3 | PSM 806 | Biostatistics I |  |
| PSYC 9070 | Proseminar: Cognitive Psychology | 3 | PSM 808 | Biostatistics II |  |
| PSYC 9230 | Proseminar: Behavioral | 3 | PSYC 9010 | Proseminar: Statistical Methods I | 3 |
|  | Neuroscience |  | PSYC 9020 | Proseminar: Statistical Methods II | 3 |
| PSYC 9560 | Proseminar: Developmental | 3 | PSYC 9070 | Proseminar: Cognitive Psychology | 3 |
|  | Psychology |  | PSYC 9230 | Proseminar: Behavioral | 3 |
| PE 9810 | Higher Education Teaching Seminar | 3 |  | Neuroscience |  |
| PE 9820 | Service Experience in Higher | 3 | PSYC 9560 | Proseminar: Developmental | 3 |
|  | Education |  |  | Psychology |  |
| UNMC: GCBA 812, PEDS 913, PHYT 942, PSM 806, PSM 808 |  |  | PE 9810 | Higher Education Teaching Seminar | 3 |
|  |  |  | PE 9820 | Service Experience in Higher | 3 |
|  |  |  |  | Education |  |
| MOTOR DEVELOPMENT AND CONTROL CONCENTRATION |  |  | UNMC: GCBA 812, PEDS 913, PHYT 942, PSM 806, PSM 808 |  |  |
| Required Courses (15 hours): |  |  | PHYSICAL ACTIVITY CONCENTRATION |  |  |
| PE 8400 | Motor Learning | 3 |  |  |  |
| PE 8410 | Motor Control | 3 | Required Courses (15 hours): |  |  |
| PE 8420 | Motor Development | 3 | PE 8130 | Implementing Physical Activity in | 3 |
| PSYC 9070 | Proseminar: Cognitive Psychology | 3 |  | Diverse Populations |  |
| MATH 8400 | Dynamical Systems and Chaos | 3 | PE 8140 | Physical Activity Measurement | 3 |
| Electives (9 hours): |  |  | NRSG 925 | Healthy Lifestyle Behavior Theory | 3 |
| PE 8450 | Advanced Biomechanics | 3 |  | \& Interventions |  |
| PE 8460 | Occupational Biomechanics | 3 | NRSG 926 | Use of Technology to Deliver \& Monitor Interventions \& Outcomes | 3 |
| CSCI 8325 | Data Structures | 3 |  |  |  |
| CSCI 8400 | Advanced Computer Graphics | 3 | COUN 8370 | Group Counseling: Theory and | 2 |
| CSCI | Introduction to Artificial | 3 |  | Practice |  |
| 4450 Intelingence |  |  | UNMC: NRSG 925, NRSG 926 |  |  |
|  |  |  | Electives (9 hours): |  |  |
| CSCI 8476 | Pattern Recognition | 3 | PE 8206/PE | Planning Worksite Wellness | 3 |
| 8500/MATH Advanced Numerical Methods I |  | 3 | 4200 | Programs |  |
|  |  | HPER 8850 | Exercise for Special Populations | 3 |  |
| 8500 |  |  |  | HED 8600 | Health Behavior | 3 |
| CSCI | Advanced Numerical Methods II | 3 | PE 8120 |  | 3 |
| 8510/MATH |  |  | PE 8120 | Management | 3 |
| 8510 |  |  | HED | Women's Health and Issues of | 3 |
| CSCI | Computer Graphics | 3 | 8706/HED | Diversity |  |
| 8626/CSCI |  |  | 4700/SOC |  |  |
| 4620GCBA 812 |  |  | 8706/SOC |  |  |
|  | Human Neuroanatomy | 3 | 4700 |  |  |

Health Aspects of Stress
Management
SOC 8200
PSYC
8636/PSYC
4630
NRSG 927
NRSG 920
PE 9810
PE 9820

Society \& Health
Organizational Psychology

Physical Activity in Clinical Research
Grant Application and Management
Higher Education Teaching Seminar
Service Experience in Higher
Education

UNMC: NRSG 927, NRSG 920
Geography
GEOGRAPHY, M.A.

## Department of Geography \& Geology, College of Arts \& Sciences

## Vision Statement

The mission of the geography graduate program is to provide quality graduate education in physical geography, human geography and spatial analysis (GIS, cartography and remote sensing). The department offers a rich learning environment for students with close interaction between faculty and students, technology-enhanced instruction, and opportunities for fieldwork. Courses enhance student's perception and appreciation of the earth's human and physical environments as well as geography's essential role in both understanding and navigating our increasingly interconnected world. The department, an active participant in its community, has ties throughout the city and state, leading to a wide variety of internship opportunities. The department is committed to providing students with the essential knowledge and skills needed to succeed, be it in professional employment or further graduate education.

## Program Contact Information:

Dr. Christina Dando, Graduate Program Chair (GPC)
Durham Science Center (DSC) 271
402-554-3134
cdando@unomaha.edu
Program Website:
http://www.unomaha.edu/geogeo/geography_graduate.php

## Application Deadlines:

- Fall: July 1
- Spring: December 1
- Summer: May 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on written TOEFL
- 173 on computer-based TOEFL
- 61 on internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Applicants must have a GPA in geography of at least a 3.0 on a 4.0 scale
- Present as a prerequisite a minimum of 15 undergraduate semester hours of geography including physical and human geography and cartography, plus at least three hours in spatial analysis, quantitative methods or statistics;
- Applicants for whom English is not the native language must have a minimum TOEFL score of 550 (213 if computer based; 79-80 internet-based)
- 53-Pearson Test of English (PTE)
- 6.5 IELTS
- Two (2) letters of recommendation
- Statement of Purpose
- Resume


## MA-GEOG DEGREE REQUIREMENTS

MA-GEOG Required Courses-Thesis (15 hours):
GEOG 8000 History and Philosophy of
Geography
GEOG 8700 Research Methods
An approved physical geography 3
course
An approved human geography
course
An approved techniques course

## MA-GEOG Electives-Thesis (9 hours):

May be completed in consultation with the graduate program chair or an area of concentration by be selected from the options below.

| MA-GEOG | equired Courses-Non-Thesis (15 ho |
| :---: | :---: |
| GEOG 8000 | History and Philosophy of Geography |
| GEOG 8700 | Research Methods |
| GEOG | Quantitative Analysis in Geography |
| 8026/GEOG |  |
| 4020 |  |
|  | An approved physical geography course |
|  | An approved human geography course |

GEOG 8026: or an approved graduate level statistics course from another department

MA-GEOG Electives-Non-Thesis ( 12 hours):
May be completed in consultation with the graduate program chair

## MA-GEOG Concentrations:

See Geography, M.A. Concentrations (p. 93)

## MA-GEOG Exit Requirements: <br> GEOG 8990 Thesis

## Comprehensive Examination

(Non-thesis)

## TOTAL CREDIT HOURS:

Thesis Option: 30
Non-Thesis Option: 36

## MA-GEOG-Other Program-Related Information:

The Department of Geography/Geology awards up to 11 graduate teaching assistantships. Applications should be directed to the department and are due March 1 for the Fall semester and October 15 for the Spring semester. The teaching assistantships require 20 hours per week of teaching or similar duties. Applications received after the deadline will be considered for the next available opening.

GEOGRAPHY, M.A. CONCENTRATIONS
Select an area of concentration (9 hours)
Courses offered through GEOG 8500 and GEOG 8600 will be submitted for inclusion in a concentration accompanied by a letter from the student's advisor or from the graduate program chair with the course title and specifying the concentration to which it applies.

## HUMAN GEOGRAPHY CONCENTRATION

## Requirements

GEOG Urban Geography

| GEOG 8130 | Seminar in Economic Geography | 3 |
| :--- | :--- | ---: |
| GEOG | Geography, Gender and Work | 3 |
| 8156/WGST |  |  |
| 8156/WGST |  |  |
| 4150/GEOG |  | 3 |
| 4150 |  | $1-$ |
| GEOG 8210 | Seminar in Cultural Geography | 3 |
| GEOG 8500 | Special Topics in Geography | $1-$ |
| GEOG 8600 | Independent Research | 3 |
|  |  | 3 |
| GEOG 8650 | Land Use | $1-$ |
| GEOG 8800 | Internship in | 6 |
|  | Environmental/Regional Planning | 3 |
| GEOG | Urbanization in Developing Areas |  |
| 8906/GEOG |  |  |
| 4900 |  |  |

GEOG 8800
Environmental/Regional Planning CONCENTRATION

## Requirements

GEOG Conservation of Natural Resources 3

8016/GEOG
4010

GEOG Process Geomorphology 3
8266/GEOG
4260
GEOG Climatology 3
8326/GEOG
4320
GEOG
8336/GEOG
4330
GEOG Water Resources 3
8346/GEOG
4340
GEOG 8500 Special Topics in Geography 1 -
GEOG 8580 Soils 3
GEOG 8600 Independent Research 1 -

GEOGRAPHIC INFORMATION SCIENCE AND TECHNOLOGY CONCENTRATION

| Requirements |  |  |
| :--- | :--- | ---: |
| GEOG | Computer Mapping and | 3 |
| 8036/GEOG | Visualization |  |
| 4030 |  |  |
| GEOG | Geographic Information Systems I | 4 |
| 8056/GEOG |  |  |
| 4050 |  | $1-$ |
| GEOG 8500 | Special Topics in Geography | 3 |
| GEOG 8600 | Independent Research | $1-$ |


|  |  | 3 |
| :--- | :--- | :--- |
| GEOG | Environmental Remote Sensing | 4 |
| 8636/GEOG |  |  |
| 4630 |  | 3 |
| GEOG 8640 | Remote Sensing: Advanced |  |
| Concepts and Applications |  |  |
| GEOG | Geographic Information Systems II | 4 |
| 8666/GEOG |  |  |
| 4660 |  | 3 |
| GEOG 8670 | Cartographic Methods | 3 |
| GEOG 8850 | GIScience Practicum |  |

## GEOSPATIAL DATABASE CONCENTRATION

## Required Courses:

GEOG Geographic Information Systems I
8056/GEOG
4050
GEOG Geographic Information Systems II
8666/GEOG
4660

## Required depending on previous experience:

## Fall/Spring

ISQA 8050
Data Organization and Storage
(non-credit course)

## Required Courses in ISQA:

## Fall

ISQA Database Administration
8306/ISQA
4300
Spring
ISQA 8410 Database Management
One elective from the following:
ISQA 8736 Decision Support Systems
ISQA Graphical User Interface
8525/ISQA
3520
Fall/Spring
ISQA 8310
Data Communications
Fall/Summer
ISQA 8380 Managing the Distributed
Computing Environment

## GEOGRAPHIC INFORMATION SCIENCE CERTIFICATE

Department of Geography, College of Arts \& Sciences

## Vision Statement

The mission of the geography graduate program is to provide quality graduate education in physical geography, human geography and spatial analysis (GIS, cartography and remote sensing). The department offers a rich learning
environment for students with close interaction between faculty and students, technology-enhanced instruction, and opportunities for fieldwork. Courses enhance student's perception and appreciation of the earth's human and physical environments as well as geography's essential role in both understanding and navigating our increasingly interconnected world. The department, an active participant in its community, has ties throughout the city and state, leading to a wide variety of internship opportunities. The department is committed to providing students with the essential knowledge and skills needed to succeed, be it in professional employment or further graduate education.

## Program Contact Information:

Dr. Christina Dando, Graduate Program Chair (GPC)
Durham Science Center (DSC) 271
402-554-3134
cdando@unomaha.edu

## Program Website:

http://www.unomaha.edu/geogeo/geography_graduate.php

## Application Deadlines:

- Fall: July 1
- Spring: December 1
- Summer: May 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IETLS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major
- Applicants for whom English is not the native language must have a minimum TOEFL score of 550 (213 if computer based; 79-80 internet-based)
- 53-Pearson Test of English (PTE)
- 6.5 IELTS
- Only required if not admitted to MA in Geography program
- Two (2) letters of recommendation
- Statement of Purpose
- Resume


## PROGRAM-SPECIFIC REQUIREMENTS:

Applicants must have a GPA in geography of at least a 3.0 on a 4.0 scale

The student must demonstrate a background in geography, statistics, and computer science.

| Prerequisites would include courses in human and <br> physical geography, statistics, and programming |  |  |
| :--- | :--- | ---: |
| such as the following: |  |  |
| GEOG 1020 | Introduction to Human Geography | 3 |
| GEOG 1070 | Physical Geography: Soils and | 4 |
| MATH 1530 | Landforms <br> Introduction to Applied Probability <br> and Statistics | 3 |
| CIST 1400 | Introduction to Computer <br> Programming | 3 |

## CERT-GIS DEGREE REQUIREMENTS

| Cert-GIS Required Courses (11 hours): |  |  |
| :--- | :--- | ---: |
| GEOG | Cartography \& GIS | 2 |
| 8535/GEOG |  |  |
| 3530 |  | 2 |
| GEOG 8545 | Cartography \& GIS Lab | 4 |
| GEOG | Geographic Information Systems I | 4 |
| 8056/GEOG |  |  |
| 4050 |  |  |
| GEOG | Geographic Information Systems II | 4 |
| 8666/GEOG |  |  |
| 4660 |  |  |

## Cert-GIS Elective Courses ( 6 hours):

| GEOG | Conservation of Natural Resources | 3 |
| :--- | :--- | :--- |
| 8016/GEOG |  |  |
| 4010 |  | 3 |
| GEOG | Computer Mapping and | 3 |

8036/GEOG Visualization
4030

GEOG Environmental Remote Sensing
8636/GEOG
4630
GEOG 8650 Land Use 3
GEOG 8800 Internship in 1 -
Environmental/Regional Planning
Students may substitute advanced courses in GIS for required courses already taken. Students will be allowed a maximum of two substitutions for these required courses. Substitution must be approved by the department GIS advisor.

Total Credit Hours: 17

## Global Information Operations

## GLOBAL INFORMATION OPERATIONS CERTIFICATE

Departments of Political Science, Computer Science and Religion and Communication, College of Graduate Studies

## Vision Statement

The Graduate Certificate in Global Information Operations will address the recognized and growing need for a broadbased understanding of international cultures and related issues in today's global society. The need for a program designed to address these diverse issues was first expressed by the United States Strategic Command (STRATCOM) but subsequently has been identified as an equally important program for UNO students in disciplines incorporating some aspect of global information operations in their curriculum. The proposed certificate is consistent with the university's Strategic Plan. The plan includes developing academic programs for varying academic, career, and personal goals of traditional and non-traditional students that prepare them for their responsibility as active citizens through leadership, participation and employment in diverse environments throughout the nation and the world (Sub-goals A and B, Goal 1 of UNO Strategic Plan). Additionally, from the proposed interdisciplinary focus may emerge previously unidentified teaching, research and outreach opportunities. The certificate program is well suited for both contract courses and individual graduate student education, both of which having the ability to generate students for existing graduate programs. For instance, several of the students who enrolled in the pilot Information Operation program course have begun the master's program in political science. The interaction generated from this certificate also may assist in developing relationships with governmental agencies leading to special opportunities for UNO to partner with the Department of Defense and other U.S. government agencies.

## Application Deadlines:

Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 for the written TOEFL
- 173 for the computer-based TOEFL
- 61 for the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 2.7 in undergraduate courses related to proposed major


## CERTIFICATE IN GLOBAL INFORMATION OPERATIONS DEGREE REQUIREMENTS

## Cert.-GINF Required Courses:

PSCI 8250 Seminar in Global Politics 3
CSCI Foundations of Information 3
8366/IASC Assurance
8366/IASC
4360
RELI 8900 Readings in Religion 1 -
COMM Topics in Communication Methods 1 -
8030

## Total Credit Hours: 12

## Health, Physical Education and Recreation

## HEALTH, PHYSICAL EDUCATION AND RECREATION, M.A.

## School of Health, Physical Education and Recreation, College of Education

Vision Statement
Graduate programs in the School of HPER are committed to preparing students for careers in health, physical education, exercise science, athletic training, physical activity, and recreation and advancing their training to assume leadership roles as educators, practitioners and researchers. Emphasis is given to producing professionals who will be lifelong learners and whose work is largely evidence based.

## Program Contact Information:

Dr. Kris Berg, Graduate Program Chair
Health Physical Education \& Recreation (HPER) 207
402-554-2670
kberg@unomaha.edu
Program Website:
http://coe.unomaha.edu/hper/

## Application Deadlines:

- Fall July 1
- Spring November 1
- Summer February 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the Written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Entrance Exam
- only for Physical Education Pedagogy, Physical Education Coaching, Exercise Science, and Physical Activity in Health Promotion concentrations.
- GRE score of 800 (verbal + quantitative) or a score of 286 (verbal + quantitative) in the new scoring system.
- Two (2) letters of recommendation
- Statement of Purpose
- Statement of goals and rationale for entering graduate program (maximum of 300 words)
MA-HPER DEGREE REQUIREMENTS
MA-HPER Required Core Course (3 hours): HPER 8030 Research in Health, Physical

MA-HPER Concentration
Student must select an area of concentration.
See Health, Physical Education, and Recreation, M.A.
Concentrations (p. 96)
MA-HPER Exit Requirements
Comprehensive Examination
Total Credit Hours: 36
HEALTH, PHYSICAL EDUCATION, AND
RECREATION, M.A. CONCENTRATIONS

## HEALTH EDUCATION CONCENTRATION

Required Concentration Courses ( $\mathbf{1 8}$ hours):
HED 8270 Interventions in Health Education 3
HED 8400 Health Promotion Program Planning 3
HED 8600 Health Behavior 3
HED 8750 Health Education: Instrmentation 3
and Evaluation
HED 8950 Public Health Leadership and 3 Advocacy
STAT 8005 Statistical Methods I OR
PE 8040 Applied Statistics in Physical Education

## Electives (15 hours):

Health/medical/education undergraduates choose at least one elective course ( 3 hours) from the following list and four courses ( 12 hours) at UNO or any of the University of Nebraska system campuses, upon approval of advisor. Students interested in worksite, community health, school health or patient education may want to choose from the following graduate course prefixes: COMM, COUN, GERO, HED, HPER, PA, PE, RLS, SOC.

## Unrelated field undergraduates choose four elective courses of the following:

| HED 8046 | Epidemiology \& Prevention of <br> Disease <br> Research Project | 3 |
| :--- | :--- | ---: |
| HPER 8100 | Human Sexuality | $1-$ |
| HED 8250 | Alcohol Education | 3 |
| HED 8330 | Health Aspects of Aging | 3 |
| HED | 3 |  |
| 8556/GERO |  |  |
| 4550/HED |  |  |
| 4550/GERO |  | 3 |
| 8556/WGST |  |  |
| 4550 | Women's Health and Issues of |  |
| HED |  |  |
| 8706/HED | Diversity | 3 |
| 4700/SOC |  | 3 |
| 8706/SOC |  | $3-$ |
| 4700 |  |  |
| HED 8850 | Health Aspects of Stress |  |
| PE 8946/PE | Management | Physiology of Exercise |

## HEALTH STUDIES CONCENTRATION

Required Concentration Courses ( 15 hours):
HED 8270 Interventions in Health Education 3
HED 8400 Health Promotion Program Planning 3
HED 8600 Health Behavior 3
HED 8750 Health Education: Instrmentation 3
and Evaluation
HED 8950
Public Health Leadership and
Advocacy

## Electives (18 hours):

Health/medical/education undergraduates choose at least one elective course ( 3 hours) from list and five courses (15 hours) at UNO or any of the University of Nebraska system campuses, upon approval of advisor. Students interested in worksite, community health, school health or patient education may want to choose from the following graduate course prefixes: COMM, COUN, GERO, HED, HPER, PA, PE, RLS, SOC.
Unrelated field undergraduates choose four elective courses of the following:

| HED 8046 | Epidemiology \& Prevention of | 3 |
| :--- | :--- | ---: |
| HPER 8100 | Disease |  |
|  | Research Project | $1-$ |
| HED 8250 | Human Sexuality | 3 |
| HED 8330 | Alcohol Education | 3 |
| HED | Health Aspects of Aging | 3 |

8556/GERO
4550/HED
4550/GERO
8556/WGST
4550
HED Women's Health and Issues of 3
8706/HED
4700/SOC
8706/SOC
4700
HED 8850 Health Aspects of Stress 3
Management
Physiology of Exercise
4940
HED 8980 Health Education Practicum 1 -

## PHYSICAL EDUCATION PEDAGOGY CONCENTRATION

Required Concentration Courses ( $\mathbf{1 2}$ hours):
PE 8040 Applied Statistics in Physical 3 Education
PE 8280 Curriculum in Physical Education 3
PE 8370 Analyzing Physical Education 3
Teaching and Sport Instruction Motor Learning

Electives (21 hours):
Choose from the following graduate course prefixes: HED, HPER, PE, RLS

## PHYSICAL EDUCATION COACHING CONCENTRATION

| Required Concentration Courses (21 hours): |  |  |
| :--- | :--- | :--- |
| PE 8040 | Applied Statistics in Physical <br> Education | 3 |
| PE 8076/PE | Optimizing Sports Performance | 3 |
| 4070 |  | 3 |
| PE 8240 | Sport in American Culture <br> PE 8370 | Analyzing Physical Education <br> Teaching and Sport Instruction |
| PE 8400 | Motor Learning | 3 |
| PE 8506/PE | Behavioral Aspects of Coaching <br> 4500 | Athletes |
| PE 8966/PE | Topics in Sports Medicine | 3 |
| 4960 |  | 3 |

## Electives (12 hours):

Choose from the following graduate course prefixes:
HED, HPER, PE, RLS

## EXERCISE SCIENCE CONCENTRATION

Five areas of emphasis are offered: Biomechanics, Exercise Physiology, Motor Development/Control, Strength and Conditioning, Sport and Exercise Psychology

| Required Concentration Courses (15 hours): |  |  |
| :--- | :--- | :--- |
| PE 8040 | Applied Statistics in Physical | 3 |
|  | Education |  |
| PE 8400 | Motor Learning | 3 |
| PE 8410 | Motor Control | 3 |
| PE 8420 | Motor Development | 3 |
| PE 8450 | Advanced Biomechanics | 3 |
| PE 8905/PE | Motivation for Physical Activity | 3 |
| 3900 |  | 3 |
| PE 8950 | Advanced Exercise Physiology | 3 |

PE 8400, PE 8410, PE 8420: one required; others may be used as electives
Electives (18 hours)

| (chosen in consultation with your advisor): |  |  |
| :--- | :--- | ---: |
| HPER 8000 | Special Studies | $1-$ |
|  |  | 3 |
| HPER 8100 | Research Project | $1-$ |
|  |  | 3 |
| HPER 8850 | Exercise for Special Populations | 3 |
| PE 8016/PE | Laboratory Methods in Exercise | 6 |
| 4010 | Science |  |
| PE 8076/PE | Optimizing Sports Performance | 3 |
| 4070 | Current Topics in Weight |  |
| PE 8120 | Management | 3 |
| PE 8130 | Implementing Physical Activity in | 3 |
| PE 8140 | Diverse Populations |  |
| PE 8206/PE | Physical Activity Measurement | 3 |
| Planning Worksite Wellness | 3 |  |


| 4200 | Programs |  |
| :---: | :---: | :---: |
| PE 8240 | Sport in American Culture | 3 |
| PE 8460 | Occupational Biomechanics | 3 |
| PE 8800 | Risk Management for Health Fitness Professionals | 3 |
| PE 8856 | Principles and Practices of Cardiovascular Disease Prevention and Treatment | 3 |
| PE 8910 | Internship in Exercise Science | 3 |
| CIP 806 | Graduate Physiology |  |
| CIP 916 | Cardiopulmonary Function in Health and Disease |  |
| COUN 8040 | Professional and Ethical Issues for Professional Counselors | 3 |
| COUN 8120 | Counseling with Parents | 3 |
| COUN 8200 | Counseling Theories | 3 |
| COUN 8500 | Counseling and Consulting for Special Concerns | 2 |
| COUN 8796 | Practical and Experiential Training in Counseling | 3 |
| COUN 8030 | Counseling Practices | 3 |
| COUN 8020 | Introduction to Counseling |  |
| MATH 8400 | Dynamical Systems and Chaos |  |
| MATH 8355 | Differential Equations | 3 |
| PSYC | Abnormal Psychology | 3 |
| 8446/PSYC |  |  |
| 4440 |  |  |
| PSYC | Personality Theories | 3 |
| 8456/PSYC |  |  |
| 4450 |  |  |
| PSYC 8590 | Psychology of Exceptional Children | 3 |
| PSYC 8836 | Individual Differences | 3 |
| PSYC 9070 | Proseminar: Cognitive Psychology | 3 |
| PSYC 9230 | Proseminar: Behavioral | 3 |
|  | Neuroscience |  |
| PSYC 9430 | Proseminar: Personality | 3 |
| PSYC 9440 | Proseminar: Social Psychology | 3 |
| PSYC 9500 | Socioemotional Development | 3 |
| PSYC 9550 | Psychosocial Development | 3 |
| PSYC 9610 | Industrial Motivation \& Morale | 3 |
| PHYSICAL ACTIVITY IN HEALTH PROMOTION CONCENTRATION |  |  |
| Required Concentration Courses (24 hours): |  |  |
| PE 8040 | Applied Statistics in Physical | 3 |
|  | Education |  |
| PE 8206/PE | Planning Worksite Wellness | 3 |
| 4200 | Programs |  |
|  | OR |  |
| BSAD 8310 | Managing Performance in | 3 |
|  | Organizations |  |
| PE 8120 | Current Topics in Weight | 3 |
|  | Management |  |
| PE 8130 | Implementing Physical Activity in Diverse Populations | 3 |


| PE 8140 | Physical Activity Measurement | 3 |
| :---: | :---: | :---: |
| HPER 8850 | Exercise for Special Populations | 3 |
| PE 8905/PE | Motivation for Physical Activity | 3 |
| 3900 OR |  |  |
|  | OR |  |
| HED 8600 | Health Behavior | 3 |
| HED 8950 | Public Health Leadership and | 3 |
| Practical Experience (3 hours): |  |  |
| HPER 8100 | Research Project | 1 - |
| Recommended Electives (6 hours) |  |  |
| (others require advisor approval): |  |  |
| HPER 8100 | Research Project | $1-$ |
| HED 8250 | Human Sexuality | 3 |
| HED 8270 | Interventions in Health Education | 3 |
| HED 3380 | Alcohol Education | 3 |
| HED 8400 | Health Promotion Program Planning | 3 |
| HED | Health Aspects of Aging | 3 |
| 8556/GERO |  |  |
| 4550/HED |  |  |
| 4550/GERO |  |  |
| 8556/WGST |  |  |
| 4550 |  |  |
| HED 8600 | Health Behavior | 3 |
| HED 8700 | Women's Health Issues | 3 |
| HED 8750 | Health Education: Instrmentation and Evaluation | 3 |
| HED 8850 | Health Aspects of Stress | 3 |
|  | Management |  |
| PE 8016/PE | Laboratory Methods in Exercise | 6 |
| 4010 | Science |  |
| PE 8400 | Motor Learning | 3 |
| PE 8450 | Advanced Biomechanics | 3 |
| PE 8856 | Principles and Practices of | 3 |
|  | Cardiovascular Disease Prevention and Treatment |  |
| PE 8865/PE | Scientific Aspects of Strength | 3 |
| 3860 | Development |  |
| PE 8950 | Advanced Exercise Physiology | 3 |
| PE 8966/PE | Topics in Sports Medicine | 3 |
| 4960 ( |  |  |
| RLS 8060 | Perspectives of Leisure Education | 3 |
| RLS 8420 | Leisure, Play and Human | 3 |
|  | Development |  |
| COMM | Organizational Communication | 3 |
| 8176 |  |  |
| COMM | Topics in Speech Communication | 3 |
| 8180 |  |  |
| COMM | Seminar in Communication \& | 3 |
| 9400/ISQA | Technology |  |
| 9900 |  |  |
| PA 8730 | Administration of Health Care | 3 |


|  | Systems | 3 |
| :--- | :--- | ---: |
| PA 8740 | Health Care Policy | 3 |
| PA 8750 | The U.S. Health Care System | 3 |
| BSAD 8320 | Seminar in Human Resource |  |
|  | Management | 3 |
| BSAD 8350 | Seminar in Management | 3 |
| BSAD 8450 | Seminar in Marketing |  |
| RECREATION ADMINISTRATION |  |  |
| CONCENTRATION |  |  |

Required Concentration Courses ( 12 hours):
RLS 8060 Perspectives of Leisure Education 3
RLS Travel and Tourism 3

8406/RLS
4400
RLS 8420 Leisure, Play and Human 3
Development
Recreation Administration 3
RLS
8246/RLS
4240
Specialization Courses (15 hours):
RLS 8000 Special Studies in Recreation and 1-
Leisure Studies 3
RLS Recreation Programming and 3
8306/RLS Leadership
4300
RLS
8536/RLS in Physical Medicine
4530
RLS RT Program Design and Leadership 3
8616/RLS
4610
HPER 8100 Research Project 1 -
PE 8206/PE Planning Worksite Wellness 3
$\begin{array}{ll}4200 & \text { Programs } \\ \text { PE } 8240 & \text { Sport in American Culture }\end{array}$
PA 8050 Public Administration and 3 Democracy
PA $8300 \quad$ Policy Design and Implementation 3
PA 8420 Public Works Management 3
TED 8486 Adult Group Leadership 3
Electives: (6 hours)
chosen to meet the needs of the area of specialization of the student

HEALTH PHYSICAL EDUCATION AND
RECREATION, M.S.
School of Health Physical Education and Recreation, College of Education

Vision Statement

Graduate programs in the School of HPER are committed to preparing students for careers in health, physical education, exercise science, athletic training, physical activity, and recreation and advancing their training to assume leadership roles as educators, practitioners and researchers. Emphasis is given to producing professionals who will be lifelong learners and whose work is largely evidence based.

## Program Contact Information:

Dr. Kris Berg, Graduate Program Chair
Health Physical Education \& Recreation (HPER) 207
402-554-2670
kberg@unomaha.edu

## Program Website:

http://coe.unomaha.edu/hper/

## Application Deadlines:

- Fall: July 1
- Spring: November 1
- Summer: February 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the Written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Entrance Exam
- ONLY for Physical Education Pedagogy, Physical Education Coaching, Exercise Science, and Physical Activity in Health Promotion concentrations.
- GRE score of 800 (verbal + quantitative) or a score of 286 (verbal + quantitative) in the new scoring system.
- Two (2) letters of recommendation
- Statement of Purpose
- Statement of goals and rationale for entering graduate program (maximum of 300 words)
MS-HPER DEGREE REQUIREMENTS
MS-HPER Required Core Course ( 3 hours):
HPER 8030 Research in Health, Physical Education and Recreation

MS-HPER Concentrations:
Student must select an area of concentration.
See Health, Physical Education, and Recreation, M.S. Concentrations (p. 100)
MS-HPER Exit Requirements:
Required
HPER 8990 Thesis 1 -
6
All candidates should carefully review the Graduate
College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval and submission of the thesis
Total Credit Hours: 30-33
HEALTH, PHYSICAL EDUCATION, AND
RECREATION, M.S. CONCENTRATIONS

## HEALTH EDUCATION CONCENTRATION

Required Concentration Courses ( 15 hours):
HED 8270 Interventions in Health Education 3
HED 8400 Health Promotion Program Planning 3
HED 8600 Health Behavior 3
HED 8750 Health Education: Instrmentation 3 and Evaluation
HED 8950 Public Health Leadership and 3
Advocacy
Electives (6 hours):
Health/medical/education undergraduates choose at least one elective course ( 3 hours) listed below and one course (3 hours) at UNO or any of the University of Nebraska system campuses, upon approval of advisor. Students interested in worksite, community health, school health or patient education may want to choose from the following graduate course prefixes: COMM, COUN, GERO, HED, HPER, PA, PE, RLS, SOC.
Unrelated field undergraduates choose two elective courses:
HED 8046 Epidemiology \& Prevention of 3

HPER 8100 Research Project 1 -
HED 8250 Human Sexuality 3
HED 8330 Alcohol Education 3
HED

| 8556/GERO |  |
| :--- | :--- |
| 4550/HED |  |
| 4550/GERO |  |
| 8556/WGST |  |
| 4550 |  |
| HED | Women's Health and Issues of |
| 8706/HED | Diversity |
| 4700/SOC |  |
| 8706/SOC |  |
| 4700 |  |
| HED 8850 | Health Aspects of Stress |
| PE 8946/PE | Management |
| Physiology of Exercise |  |
| HED 8980 | Health Education Practicum |

## PHYSICAL EDUCATION PEDAGOGY CONCENTRATION

| Required Concentration Courses (12 hours): |  |  |
| :--- | :--- | :--- |
| PE 8040 | Applied Statistics in Physical <br> Education | 3 |
| PE 8280 | Curriculum in Physical Education | 3 |
| PE 8370 | Analyzing Physical Education <br> Teaching and Sport Instruction <br> PE 8400 | Motor Learning |
|  |  | 3 |

Electives (9 hours):
Choose from the following graduate course prefixes:
HED, HPER, PE, RLS

## PHYSICAL EDUCATION COACHING CONCENTRATION

## Required Concentration Courses ( $\mathbf{1 5}$ hours)

(chosen in consultation with your advisor):
PE $8040 \quad$ Applied Statistics in Physical 3

PE 8076/PE Optimizing Sports Performance 3
4070
PE 8240 Sport in American Culture
PE 8370
Analyzing Physical Education
Teaching and Sport Instruction
PE 8400
Motor Learning
PE 8506/PE Behavioral Aspects of Coaching
4500
PE 8966/PE Topics in Sports Medicine 4960
Electives (6 hours):
Choose from the following graduate course prefixes:
HED, HPER, PE, RLS

## EXERCISE SCIENCE CONCENTRATION

Five areas of emphasis are offered: Biomechanics,
Exercise Physiology, Motor Development/Control,
Strength and Conditioning, Sport and Exercise Psychology

| Required Concentration Courses (15 hours): |  |  |
| :---: | :---: | :---: |
| PE 8040 | Applied Statistics in Physical | 3 |
|  | Education |  |
| PE 8400 | Motor Learning | 3 |
| PE 8410 | Motor Control | 3 |
| PE 8420 | Motor Development | 3 |
| PE 8450 | Advanced Biomechanics | 3 |
| PE 8905/PE | Motivation for Physical Activity | 3 |
| 3900 |  |  |
| PE 8950 | Advanced Exercise Physiology | 3 |

PE 8400, PE 8410, PE 8420: one required; others may be used as electives

## Electives (6 hours)

(chosen in consultation with your advisor):
HPER $8000 \quad$ Special Studies
HPER 8100 Research Project 1-
HPER 8850 Exercise for Special Populations 3
PE 8016/PE Laboratory Methods in Exercise 6
4010 Science
PE 8076/PE Optimizing Sports Performance 3
4070
PE $8120 \quad$ Current Topics in Weight 3
Management
PE 8130 Implementing Physical Activity in 3
Diverse Populations
PE $8140 \quad$ Physical Activity Measurement 3
PE 8206/PE Planning Worksite Wellness 3
4200 Programs
PE $8240 \quad$ Sport in American Culture 3
PE 8460 Occupational Biomechanics 3
PE 8800 Risk Management for Health Fitness 3
PE 8856 Principles and Practices of 3
Cardiovascular Disease Prevention
and Treatment
PE 8910 Internship in Exercise Science 3
CIP 806 Graduate Physiology
CIP 916 Cardiopulmonary Function in Health and Disease
COUN 8040 Professional and Ethical Issues for 3
Professional Counselors
COUN 8120 Counseling with Parents 3
COUN 8200 Counseling Theories 3
COUN 8500 Counseling and Consulting for 2
Special Concerns
COUN 8796 Practical and Experiential Training 3
in Counseling

| COUN 8030 | Counseling Practices | 3 |
| :---: | :---: | :---: |
| COUN 8020 | Introduction to Counseling |  |
| MATH 8400 | Dynamical Systems and Chaos | 3 |
| MATH 8355 | Differential Equations | 3 |
| PSYC | Abnormal Psychology | 3 |
| 8446/PSYC |  |  |
| 4440 |  |  |
| PSYC | Personality Theories | 3 |
| 8456/PSYC |  |  |
| 4450 |  |  |
| PSYC 8590 | Psychology of Exceptional Children | 3 |
| PSYC 8836 | Individual Differences | 3 |
| PSYC 9070 | Proseminar: Cognitive Psychology | 3 |
| PSYC 9230 | Proseminar: Behavioral | 3 |
| PSYC 9430 | Proseminar: Personality | 3 |
| PSYC 9440 | Proseminar: Social Psychology | 3 |
| PSYC 9500 | Socioemotional Development | 3 |
| PSYC 9550 | Psychosocial Development | 3 |
| PSYC 9610 | Industrial Motivation \& Morale | 3 |
| PHYSICAL PROMOTIO | ACTIVITY IN HEALTH N CONCENTRATION |  |
| Required Con | centration Courses (24 hours): |  |
| PE 8040 | Applied Statistics in Physical | 3 |
|  | Education |  |
| PE 8206/PE | Planning Worksite Wellness | 3 |
| 4200 | Programs |  |
|  | OR |  |
| BSAD 8310 | Managing Performance in | 3 |
|  | Organizations |  |
| PE 8120 | Current Topics in Weight | 3 |
|  | Management |  |
| PE 8130 | Implementing Physical Activity in Diverse Populations | 3 |
| PE 8140 | Physical Activity Measurement | 3 |
| HPER 8850 | Exercise for Special Populations | 3 |
| PE 8905/PE | Motivation for Physical Activity | 3 |
| 3900 |  |  |
|  | OR |  |
| HED 8600 | Health Behavior | 3 |
| HED 8950 | Public Health Leadership and | 3 |
|  | Advocacy |  |
| RECREATION ADMINISTRATION CONCENTRATION |  |  |
| Required Concentration Courses (15 hours): |  |  |
| RLS 8060 | Perspectives of Leisure Education | 3 |
| RLS | Recreation Administration | 3 |
| 8246/RLS |  |  |
| 4240 |  |  |
| RLS | Travel and Tourism | 3 |
| 8406/RLS |  |  |
| 4400 |  |  |
| RLS 8420 | Leisure, Play and Human | 3 |

COUN 8020 Introduction to Counseling 1
MATH 8400 Dynamical Systems and Chaos 3
MATH 8355 Differential Equations 3
PSYC
8446/PSYC

8456/PSYC
4450
PSYC 8590
PSYC 8836
Individual Differences
Proseminar: Behavioral
Neuroscience
PSYC 9430 Proseminar: Personality
PSYC 9440 Proseminar: Social Psychology
PSYC 9550
PSYC 9610 Industrial Motivation \& Morale

## PROMOTION CONCENTRATION

Required Concentration Courses ( 24 hours):
PE 8040 Applied Statistics in Physical Education
PE 8206/PE Planning Worksite Wellness
Programs
OR

Organizations
Management Diverse Populations
PE $8140 \quad$ Physical Activity Measurement
HPER 8850 Exercise for Special Populations
PE 8905/PE

OR
HED 8600 Health Behavior

RECREATION ADMINISTRATION CONCENTRATION
understand history at a much deeper level than when they entered the program.

## Program Contact Information:

Dr. John Grigg, Graduate Program Chair (GPC)
Arts \& Sciences Hall (ASH) 287
jgrigg@unomaha.edu

## Program Website:

http://www.unomaha.edu/history/

## Application Deadlines:

- Fall: July 5
- Spring: November 15
- Summer: March 15


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the Written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Complete 21 semester hours of undergraduate work in history, including a course on historical research, with a 3.0 grade point average (on a 4.0 scale).
- Two (2) Letters of Recommendation are required.
- Because we seek to determine your potential as a historian, letters of recommendation should be solicited primarily from historians with whom you have worked during your academic career. If you did not major in history and therefore cannot get letters from historians, then the best remaining option is to obtain letters from professors in the field in which you majored. Letters of recommendation from employers, family friends, and the like are essentially useless to us.
- Statement of Purpose (Essay)
- Submit an essay of 250-500 words describing the applicant's interests in history and why he or she wishes to earn an M.A. degree in History.
- Writing Sample
- 10-12 pages in length from an upper division history course.
- The History Graduate Program Committee may choose, in rare cases, to admit provisionally any student who does not meet all of the above requirements, with the understanding that all conditions for unconditional admission must be met before HIST 8010 or 9100 courses may be taken.
- Students who have no undergraduate course in historical research and writing must successfully complete HIST2010 (Historical Methodology) OR HIST3930 (Historical Research) during one of the first two semesters of their enrollment. This course, required of all undergraduate history majors at UNO, seeks to develop two skills essential to all historians: the ability to write clearly and the ability to conduct critical and thorough research. Students who lack these skills may anticipate serious problems in their studies.
- Interpretation of this requirement rests with the History Graduate Program Committee. Students who believe that they have taken a comparable course may be asked to submit examples of their work, which will enable the Graduate Program Committee to assess their proficiency.


## MA-HIST REQUIRED COURSES:

In the pursuit of the MA in history via the programs of study described below, the following courses are considered to be "graduate student only" courses:

- HIST8010 Research/Directed Readings
- HIST8020 Graduate Internship
- HIST8030 Graduate Historical Methodology
- HIST9100 Seminar in History
- HIST9200 Colloquium

Thesis Option (30 hours):
The 30 hour program includes six (6) hours of thesis credit, plus twenty-four (24) credit hours in graduate coursework. This program is especially recommended for students who wish to continue work toward a Ph.D., but is open to any student. Students intending to write a thesis are encouraged, but not required, to complete HIST8030 Graduate Historical Methodology.

Students who intend to write a thesis should bear in mind that this is a substantial undertaking and one that normally takes at least a year of focused research, background
reading, writing, and revision to complete. An MA thesis must present original research and provide evidence of both extensive work in primary sources and engagement with the current scholarship on the subject matter in question. Students should develop some idea of a topic well before they complete their coursework and, in conjunction with the Graduate Program Chair, identify the department member best suited to supervise the thesis. Each faculty member of the department has complete discretion as to whether he or she will work with a particular student and whether the proposed topic is acceptable. Further discussion on thesis topics will be addressed during advising and/or new student orientation.
A total of 24 hours of graduate courses in history. Or Fifteen (15) hours of approved graduate courses in history
PLUS nine (9) approved hours of graduate coursework in a related field that will constitute a minor.
Permission to take a graduate minor must be obtained from the Graduate Program Chair. The department in which the minor is planned must be consulted to determine the student's eligibility to do graduate work in that department.

## Or Fifteen (15) hours of approved graduate courses in history

PLUS nine (9) approved hours of graduate work in ethnic, gender, urban, regional, or other approved thematic study
from two or more departments other than the history department. Permission to take a thematic studies program must be obtained from the student's advisor and approved by the History Graduate Program Committee.
In planning their program of study, all candidates planning on writing an MA thesis must fulfill the following requirements:

- Complete at least three (3) hours of HIST9100
- Complete at least three (3) hours of HIST9200
- Complete at least three (3) further hours from either HIST9100 or HIST9200
- Complete at least three (3) further hours of coursework in "graduate student only" courses
HIST 9100 Seminar in History
Students completing an MA with thesis may include no more than three (3) hours total from among HIST8010 and HIST8020.

HIST 8010 Research Directed Readings Project 1 -

Non-Thesis Option (36 hours):
Thirty-six (36) hours of graduate coursework in history.
HIST 9100 Seminar in History

HIST 8010 Research Directed Readings Project 1 -

Or twenty-seven ( 27 hours) of history graduate coursework
HIST 9100 Seminar in History
PLUS nine (9) hours of graduate coursework in a related field that will constitute a minor.

Permission to take a graduate minor must be obtained from the Graduate Program Chair and/or the History Department Graduate Committee. The department in which the minor is planned must be consulted to determine the student's eligibility to do graduate work in that department.
Or twenty-seven ( 27 hours) of history graduate coursework
HIST 9100 Seminar in History
PLUS nine (9) hours of graduate coursework in ethnic, gender, urban, regional, or other approved thematic study from two or more departments other than the history department.

Permission to take a thematic studies program must be obtained from the Graduate Program Chair and/or the History Department Graduate Committee. The departments in which thematic studies courses will be taken must be consulted to determine the student's eligibility to do graduate work in that department.
Candidates who elect the MA without thesis option must fulfill the following requirements:

- Complete at least three (3) hours of HIST9100
- Complete at least six (6) hours of HIST9200
- Complete at least three (3) further hours from either HIST9100 or HIST9200
- Complete at least six (6) further hours of coursework in "graduate student only" courses
- Successfully pass comprehensive exams which may only be taken after the candidate has successfully completed all other requirements for the MA.
HIST 9100 Seminar in History
Students completing an MA without thesis may include no more than six (6) hours total from among HIST8010 and HIST8020.

Students completing comprehensive exams have a total of six hours to write the exams, divided into two three-hourdays. On each day, students are provided a list of five
questions of which they have to answer three. Students are required to pass each day with a $B$ - being the lowest passing grade. Students who fail either half of their comprehensive exams are permitted to re-take that half of the exam once. A second failure on that half of the exam constitutes a failure to successfully complete the MA program in history. Students who fail both halves of their comprehensive exams are permitted to re-take the entire exam once. A second failure on either half of the exam constitutes a failure to successfully complete the MA program. Students who wish to re-take half or all of the comprehensive exams must wait until the next time the exams are offered.

Comprehensive exams are offered once in each semester (fall, spring, summer) on dates which will be announced by the Graduate Program Chair at some time in the immediately preceding semester. The content of the exams depends upon the make up of the student's course of study. In general, students who complete twenty-seven (27) hours or more of coursework in US history will take the US general exams. Students who complete less than twentyseven (27) hours of coursework in US history will take an exam which is tailored to fit their program of study. The exact nature of these composite exams will be determined in consultation with the Graduate Program Chair.

Further details on comprehensive exams will be provided during advising and/or new student orientation.

HIST 8010 Research Directed Readings Project 1 -

## MA-HIST Exit Requirements:

## Thesis Option:

HIST 8990 Thesis

All candidates should carefully review the Graduate College requirements for forming a Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval and submission of a thesis.

## Non-thesis Option:

Comprehensive Examination
Examinations are offered three times a year (fall, spring, and summer semesters). Exams are normally taken once a student has completed all coursework, but may be taken during the semester in which a student is taking his/her final classes. Further details on comprehensive examinations will be provided during advising and/or new student orientation.

## TOTAL CREDIT HOURS:

Thesis Option: 30
Non-Thesis Option: 36

## MA-HIST-Other Program-Related Information:

## Course Attendance Requirement and Withdrawal Policy

- All History Department faculty may, at their own discretion, remove from any class any graduate student who misses three or more classes during a single semester.
- The History Department Graduate Program Committee may remove from the program any student who withdraws from three or more courses.


## Academic Progress

- Each candidate must complete his or her MA degree within eight (8) years of starting the program. A candidate who, owing to extenuating circumstances, is unable to meet this requirement may appeal in writing to the Graduate Program Chair and/or the History Department Graduate Committee for an extension of time. Such extensions will normally be granted only in cases of serious illness or military deployment.
- In addition to conforming to all requirements for academic progress laid down by the Office of Graduate Studies, the History Department notes the following: pursuant to the section "Automatic Dismissal," wherein is noted "Departments/Schools may have additional and more stringent criteria for evaluating a student's performance and may demand a higher level of performance than that demanded by the Graduate College," please note:
- The History Department at UNO will automatically dismiss from the program any student who is awarded any grade below B- in two (or more) classes, regardless of whether or not they have complied with other requirements of satisfactory progress.
*** Redirect Link ***
*** History-Minor ***
*** Redirect Link ***
*** Native-American-Studies-Minor ***


## Information Assurance

## INFORMATION ASSURANCE, M.S.

Department of Information Assurance, College of Information, Science \& Technology
Vision Statement
To estimate the projected need for Information Assurance professionals in Nebraska, it is important to understand the sheer scope of the businesses present in
Nebraska. Nebraska hosts the world headquarters for five Fortune 500 businesses, and employs some 50,000 workers in the financial sector alone. With many large-scale
businesses moving into the Omaha area, such as E-bay, PayPal, and Google, the need for solid Information Assurance professionals is only expected to rise. In addition, the United States Strategic Command, located just south of the greater Omaha area, holds the computer network attack and defense missions for the United States military. The US Strategic Command is always in need of Information Assurance professionals, whether working directly for the government in a civilian capacity, or for one of the dozens of major contracting companies, such as Booz-Allen Hamilton, Northrop Grumman, or Lockheed Martin. The need for sustaining and continuously training an Information Assurance workforce is now more crucial than ever due to the continually changing nature of threats to information systems.

It is imperative for Nebraska to create and sustain a longterm investment in Information Assurance to support the investors in our local economy. A Master's Degree in Information Assurance will provide a credential to assure employers they are receiving exceptional employees with the most advanced knowledge possible. The MSIA will echo the emphasis placed on creativity, independent thought and research that is a hallmark of all Master's Degree programs at the University of Nebraska at Omaha. This will ensure our graduates embody the innovative spirit to propel business and economy well into the future. The Peter Kiewit Institute is used as a recruiting tool by Chambers of Commerce around the state. An MSIA program at UNO would build the Chambers' persuasive power to convince more businesses to relocate to our state, by demonstrating the availability of a highlyeducated Information Technology and Assurance workforce.

## Program Contact Information:

Dr. William Mahoney, Graduate Program Chair Peter Kiewit Institute (PKI) 282F
402-554-3975
wmahoney@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu

## Program Website:

http://si2.ist.unomaha.edu/?p=msia

## Application Deadlines:

- Fall: July 1
- Spring: December 1
- Summer: April 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- All applicants must have the equivalent of a 4-year undergraduate degree.
- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the US, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL scores.
- The minimum TOEFL requirement is 550 (written); 213 (computer-based); 79 (internet-based).
- Graduate Record Exam (GRE) scores required
- There is no minimum GRE requirement, but the applicant's score will be one factor used in evaluating the student's portfolio. The GRE test requirement is waived if: the student is a graduate of the University of Nebraska system with a degree in Computer Science or Management Information Systems and a GPA of 3.5 or more, OR the student has earned an MS or advanced degree in a closely related discipline.
- Three (3) Letters of Recommendation
- References who can evaluate your work and/or academic achievements
- Writing Sample
- From work or previous academic experiences. Alternatively, if you do not have a writing sample, please submit a two-page double-spaced wordprocessed essay that addresses the following two topics:
- Discussion of two accomplishments that demonstrate your potential for success in the graduate program
- Discussion of your unique personal qualities and life experiences that distinguish you from other applicants to this graduate program
- Resume
- Include your work experience and background
- OPTIONAL: Interview
- Although not required, applicants are strongly encouraged to arrange for an interview with one or more members of the Graduate Program Committee by directly contacting the Committee Chairperson. Telephone interviews are highly recommended for applicants outside the local area.
- Undergraduate coursework must include:
- Programming in C or C++, Networking (CSCI 1840 or CSCI 2840 or equivalent, CSCI 3550 or ISQA 3400 or equivalent)
- Foundation courses ensure all students in the MS IASC program have a solid groundwork upon which to build the rest of the program. These courses not only provide essential prerequisite knowledge and skills for other courses in the program, but they also contain a distinct body of knowledge that is an important part of the IA professional's education. All foundation courses are required for all students. However, students who have obtained an undergraduate IA degree will typically already have this foundation. In such a case, most, if not all, foundation courses are usually waived. Students with undergraduate degrees in other disciplines, including Computer Science, Management Information Systems, or Engineering, will usually require one or more foundation courses. Occasionally, a student's work experience may be sufficient to waive one or more of the foundation courses.
- Waivers for foundation courses are granted by the chair of the Graduate Program Committee upon the recommendation of the faculty member who is responsible for an individual course. Students requesting a waiver for a particular course should be prepared to meet with a faculty member and answer questions in the area of the course. They should bring to the meeting any relevant transcripts, course syllabi, course material, or evidence of practical experience. Some foundation courses may have an option for testing out.
- Foundation courses cannot be used to satisfy the 33 semester hours required for the MS in Information Assurance degree. Students who have not completed all the foundation course requirements may be admitted on a provisional status until those requirements have been completed. All foundation courses must be completed prior to or concurrent
with the first six (6) hours of MS-IASC graduate coursework.


## MS-IA DEGREE REQUIREMENTS

MS-IA Thesis Option (33 hours):
Core Courses (9 hours):
IASC Foundations of Information 3
8366/IASC Assurance
4360/CSCI
8366
IASC 8410
Distributed System and Network
ISQA Computer Security Management
8546/CIST
4540

## Systems Concentration

Required Courses (12 hours):
IASC 8420 Software Assurance 3
CSCI 8610 Fault Tolerant Distributed Systems 3
IASC 8386 Computer and Network Forensics 3
IASC 8356 Advanced Vulnerability Discovery 3
Electives ( 6 hours; choose any two from below):
CSCI $8440 \quad$ Secure Systems Engineering
CSCI 8430 Trusted System Design, Analysis 3
CSCI Advanced Operating Systems 3
8530/CSCI
4510
CSCI Number Theory \& Cryptography
8566/MATH
4560/MATH
8566/CSCI
4560
IASC 8080

IASC
8456/IASC
4450
IASC 8490
IASC 8510
IASC $8520 \quad$ Business Continuity \& Disaster 3
Planning
IASC 8990 Thesis in Information Assurance 1 -
ISQA 8530 E-Commerce Security 3
ISQA 8560 Information Warfare and Security 3
Management and Policy Concentration
Required Courses (12 hours):
ISQA 8530 E-Commerce Security 3
ISQA 8570 Information Security Policy and 3
Ethics
ISQA 8580 Security Risk Management and

|  | Assessment |
| :--- | :--- |
| IASC 8510 | Information Technology Governance |
|  | \& Compliance |


| CSCI | Advanced Operating Systems | 3 |
| :--- | :--- | :--- |
| 8530/CSCI |  |  |
| 4510 |  |  |

## Electives (6 hours; choose any two from below):

IASC 8440 Secure Systems Engineering 3
CSCI 8430 Trusted System Design, Analysis 3
and Development
CSCI
8530/CSCI
4510
CSCI Number Theory \& Cryptography
8566/MATH
4560/MATH
8566/CSCI
4560
IASC $8080 \quad$ Special Topics in Information $\quad 1-$
IASC Host-Based Vulnerability Discovery 3
8456/IASC
4450
IASC 8510 Information Technology 3
IASC $8520 \quad$ Business Continuity \& Disaster 3
Planning
IASC 8990 Thesis in Information Assurance 1 -
ISQA 8530 E-Commerce Security 3
ISQA 8560 Information Warfare and Security 3
ISQA 8570 Information Security Policy and 3
ISQA 8580 Security Risk Management and 3
Assessment
IT Audit and Control
OR
ACCT Information Systems Auditing
8096/ACCT
4090
CSCI 8530, CSCI 8566: (unless taken as concentration)
Management and Policy Concentration
Required Courses ( 15 hours):
$\begin{array}{lll}\text { ISQA 8580 } & \text { Security Risk Management and } & 3 \\ \text { ISQA 8530 } & \text { Assessment } \\ \text { E-Commerce Security } & 3\end{array}$
Ethics
Electives ( 6 hours; choose any two from below):
IASC 8440 Secure Systems Engineering 3
CSCI 8430 Trusted System Design, Analysis 3
and Development
CSCI 8530/CSCI 4510
CSCI
8566/MATH
4560/MATH
8566/CSCI
4560
CSCI 8610
IASC 8080
IASC 8356
IASC 8386
IASC 8420
IASC 8490
IASC 8900
ISQA 8090
ISQA
8596/ISQA
4590
AssuranceSoftware Assurance

Research Methods
IT Audit and Control

Advanced Operating Systems

Number Theory \& Cryptography

Fault Tolerant Distributed Systems
Special Topics in Information
Advanced Vulnerability Discovery
Computer and Network Forensics
Advanced Computer Forensics ..... 3

Independent Study

## OR

ACCT
Information Systems Auditing

8096/ACCT
4090

## Department of Information Systems and Quantitative Analysis, College of Information Science \& Technology Vision Statement

The goal of the ISQA graduate certificate program is to allow post-baccalaureate students and working professionals to expand their educational background and complete work that could count towards a graduate degree. Earning the graduate certificate will enhance skill sets; provide exposure to new information technologies, theories and practices; allow individuals to work toward various professional certifications; increase growth potential with employers; and increase prospects of obtaining a graduate degree. The graduate certificate program offers existing technical and managerial professionals the chance to improve and hone their communication skills to aide in their professional development.
The Information Assurance (IA) Certificate will provide students with the technical, organizational and managerial background to assist in planning, deploying, and managing security technologies to achieve information assurance.

## Program Contact Information:

Dr. Peter Wolcott, Graduate Program Chair (GPC)
Peter Kiewit Institute (PKI) 177E
402-554-3158
pwolcott@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu

## Program Website:

http://si2.ist.unomaha.edu/?p=msia

## Application Deadlines:

- Fall: July 1
- Spring: December 1
- Summer: April 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the United States, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL scores.
- Paper-based TOEFL: 550
- Computer-based TOEFL: 213
- Internet-based TOEFL: 79
- IELTS: 6.5
- The minimum undergraduate grade point average requirement for the MS in MIS program is 2.80 or equivalent score on a 4.00 scale. Applicants should have the equivalent of a 4-year undergraduate degree.


## CERT-INFA DEGREE REQUIREMENTS

Undergraduate deficiency requirements must be completed with grades of " $B$ " or better:
CIST 2100 Organizations, Applications and Technology
ISQA 8040 An Overview of Systems Development
ISQA 8050 Data Organization and Storage
Cert-INFA Required Courses ( 9 hours):
ISQA Computer Security Management
8546/CIST
4540
ISQA 8570 Information Security Policy and Ethics
ISQA 8580 Security Risk Management and Assessment
Cert-INFA Electives ( $\mathbf{3}$ hours; select one of the following):
ISQA 8530
E-Commerce Security
ISQA 8560 Information Warfare and Security
ISQA 8080 Seminar in Management Information 1 Systems
ISQA 8900 Independent Research in 1 Management Information Systems

ISQA 8080, ISQA 8900: must be related to information assurance

## Cert-INFA-Other Program-Related Information:

The certificate in Information Assurance can be obtained online, but students will need to consult with the Graduate Program chair on course offerings.

## Completion of the Certificate

During what is expected to be the semester the certificate is completed and prior to the posted deadline, students should apply for the certificate through mavlink on or before the deadline. Information can be found at:
http://www.ses.unomaha.edu/registrar/graduate.php. If you complete the application form and do not complete all of the requirements for the certificate, contact the Office of Graduate Studies as soon as possible. You must reapply during the next semester in which you expect to complete the certificate; no additional fee is charged to reactivate your application.

The following requirements are due 12 working days prior to commencement:

- "Incomplete" and "NR" grades from previous terms must be removed so that the grade will be in the Office of Graduate Studies.
- All fees, fines, and other obligations due the university must be settled.

For students currently enrolled in courses that are a part of their plan of study, enrollment must be maintained in order to complete the certificate. A grade for any current enrollment must be received by the Registrar's Office no later than the close of business on the fifteenth working day following the end of a semester.

## Awarding of Graduate Certificates

The Office of Graduate Studies will mail the certificate to students when all requirements are completed and all obligations to the university are satisfied. The Graduate College will not approve any changes in the student's permanent record once the certificate is awarded.
Total Credit Hours: 12
Information Technology
INFORMATION TECHNOLOGY, PH.D.
Department of Information Systems and Quantitative Analysis, College of Information, Science \& Technology Vision Statement

The mission of the Ph.D. program is to prepare students with the following abilities:

- Understanding of the theory and application of information technology focused around the core areas of computer science, management information systems and interdisciplinary informatics.
- Knowledge of the analysis, design, development, and implementation of current and future information technologies;
- Competence in conducting and managing high-quality, basic and applied research;
- Solid grounding in the fundamentals of academic teaching;
- Strong foundation in multidisciplinary and emergent areas in information technology


## Program Contact Information:

Dr. Prithviraj Dasgupta, Graduate Program Chair
Peter Kiewit Institute (PKI) 174G
402-554-4966
pdasgupta@unomaha.edu

## Program Website:

http://phd.ist.unomaha.edu/

## Application Deadlines:

- Fall: February 15
- Spring: September 15
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Graduate Record Examination (GRE): must score 310 out of 336 , or a GMAT score above the 80 th percentile
- Three (3) Letters of Recommendation
- From references who are able to give an in-depth evaluation of your strengths and weaknesses with respect to academic work, and who are competent
to judge your probability of success in graduate school.
- Statement of Purpose is required (not to exceed two pages) which address the following questions:
- What do you hope to accomplish with a Ph.D. in Information Technology?
- Why are you applying to this specific program?
- What background or qualifications do you have that you believe are essential to success in this program?
- What general area or topics do you hope to study?
- What do you expect to be doing five to ten years after finishing the Ph.D. program?
- Writing Sample
- Evidence of graduate potential in the form of academic papers, publications, theses or project reports done in an academic or industrial setting.
- A resume is required.


## INFTPHD DEGREE REQUIREMENTS

The Ph.D. in IT program requires 90 credit hours of graduate-level studies. Undergraduate course credits taken at UNO or another institution cannot be counted toward the Ph.D. degree in IT. Dual-listed undergraduate courses ending in $8 * * 5$ cannot be counted as course credits in the Ph.D. program.

The coursework consists of foundation courses, doctoral seminar and colloquia, a major field of study, an optional minor field of study, and the dissertation. Incoming Ph.D. students are placed into one of three tracks (computer science, information systems, or integrated informatics) based on their backgrounds and research interests. The different categories of credit-hour requirements for the program are outlined below.

## Foundation Courses ( $\mathbf{2 4}$ hours minimum):

The foundation courses are divided into three tracks: computer science, information systems and integrated informatics, based on the three units within the College of IS\&T. The list of acceptable foundation courses in each track is given below. Each course is 3 credit hours.
Computer Science Track Required Courses (15 hours):
CSCI 8700 Software Specification and Design 3
CSCI Design and Analysis of Algorithms 3
8080/MATH
8080
CSCI Advanced Operating Systems
8530/CSCI
4510
ISQA 8310
ISQA 8810

Data Communications 3
Information Technology Project
Fundamentals

| Computer Science Track Optional Courses (select 3; 9 hours): |  |  |
| :---: | :---: | :---: |
| CSCI 8150 | Advanced Computer Architecture | 3 |
| CSCI 8000 | Advanced Concepts in Programming Languages | 3 |
| ISQA 8210 | Management of Software Development | 3 |
| ISQA 8410 | Database Management | 3 |
| ISQA 8380 | Managing the Distributed Computing Environment | 3 |
| ISQA 8186 | Electronic Commerce | 3 |
| $\begin{aligned} & \text { CSCI } \\ & 8256 / \mathrm{CSCI} \\ & 4250 \end{aligned}$ | Human Computer Interaction | 3 |
| Student may also select one of the following: |  |  |
| CSCI 8350 | Data Warehousing and Data Mining | 3 |
| ISQA 8700 | Data Warehousing: Theory and Practice | 3 |
| Information Systems Track Required Courses (15 hours): |  |  |
| ISQA 8220 | Advanced Systems Analysis and Design | 3 |
| ISQA 8310 | Data Communications | 3 |
| ISQA 8410 | Database Management | 3 |
| CSCI 8010 | Foundations of Computer Science | 3 |
| CSCI | Operating Systems | 3 |
| 8506/CSCI |  |  |
| 4500 |  |  |
| Information Systems Track Optional Courses (select 3; 9 hours): |  |  |
| CSCI | Design and Analysis of Algorithms | 3 |
| $\begin{aligned} & \text { 8080/MATH } \\ & 8080 \end{aligned}$ |  |  |
| CSCI 8000 | Advanced Concepts in Programming Languages | 3 |
| ISQA 8210 | Management of Software | 3 |
|  | Development |  |
| ISQA 8380 | Managing the Distributed | 3 |
|  | Computing Environment |  |
| ISQA 8810 | Information Technology Project | 3 |
|  | Fundamentals |  |
| ISQA 8186 | Electronic Commerce | 3 |
| CSCI | Human Computer Interaction | 3 |
| 8256/CSCI |  |  |
| 4250 |  |  |
| Student may also select one of the following: |  |  |
| CSCI 8350 | Data Warehousing and Data Mining | 3 |
| ISQA 8700 | Data Warehousing: Theory and Practice | 3 |
| Integrated Informatics Track Required Courses (15 hours): |  |  |
| CSCI 8700 | Software Specification and Design OR | 3 |

ISQA 8220 Advanced Systems Analysis and 3 Design
ISQA 8310 Data Communications 3
ISQA 8410 Database Management 3
CSCI 8010 Foundations of Computer Science 3
CSCI Operating Systems
8506/CSCI
4500

| Integrated Informatics Track Optional Courses (select |  |  |
| :---: | :---: | :---: |
| CSCI | Design and Analysis of Algorithms | 3 |
| 8080/MATH |  |  |
| 8080 |  |  |
| CSCI 8150 | Advanced Computer Architecture | 3 |
| CSCI | Advanced Operating Systems | 3 |
| 8530/CSCI |  |  |
| 4510 |  |  |
| CSCI 8000 | Advanced Concepts in Programming | 3 |
|  | Languages |  |
| ISQA 8210 | Management of Software | 3 |
|  | Development |  |
| ISQA 8380 | Managing the Distributed | 3 |
|  | Computing Environment |  |
| ISQA 8810 | Information Technology Project | 3 |
|  | Fundamentals |  |
| Student may also select one of the following: |  |  |
| CSCI 8350 | Data Warehousing and Data Mining | 3 |
| ISQA 8700 | Data Warehousing: Theory and | 3 |
|  | Practice |  |

## Research Foundations/Seminars (6 hours minimum):

Must include:
CIST 9080 Research Directions in IT

## Colloquia (3 hours minimum):

These courses are required for all students. They are offered simultaneously during one semester. (1 hour each, 3 hours total)
CIST 9040 Colloquium on IT Research 1

CIST 9050 Colloquium on IT Teaching 1
CIST 9060 Colloquium on IT Profession and
Ethics

## Major Field of Study (18 hours minimum):

Coursework in the major field of study provides students the advanced study needed to develop an in-depth knowledge of their chosen field of research. At least 3 courses ( 9 hours) must be in 9000-level courses. The remaining courses should include at least one 8000-level graduate-only course. The remaining 6 hours should be determined by the supervisory committee.

## Minor Field of Study (optional):

In consultation with his or her supervisory committee, the student may choose an appropriate minor area of study related to the major field of study.

## Dissertation (24 hours minimum)

The coursework taken by a student is entered into a plan of study that must be approved by the doctoral program committee before the beginning of the Ph.D. student's second year of studies. Undergraduate courses, either taken at UNO or at other universities, are NOT allowed to be counted as credits toward the Ph.D. degree.

## Comprehensive Examination \& Admission to Candidacy

The comprehensive examination can be taken after the student has completed all coursework according to his or her plan of study and formed a supervisory committee.
The comprehensive exam consists of a written part and an oral part. The written part of the exam is divided into two sub-parts that will be scheduled over two consecutive days.

- Written Part I Examination Format and Procedure: Before taking the written part of the exam, students will provide a selection of 4-5 topics from the areas covered in the CIST 9080 Research Directions in IT course. The selected topics should not have significant overlap within the major or minor area of study given in the student's plan of study. The topics should be selected so that they express a breadth in the areas in the core disciplines of the program in computer science, information systems and integrated informatics. The doctoral program committee will select two topics from the set of 4-5 topics and inform the student in advance of the exam. The material related to the topic for preparing for the comprehensive exam (e.g., paper reading list) will already have been provided to the student when the student took the CIST 9080 course. Questions on the selected topics will be set by the faculty presenter(s) of the topic in CIST 9080. The answers will also be evaluated by the topic's presenter(s), either individually or by a group of faculty members selected by the topic's presenter(s).
- Written Part II Examination Format and Procedure: The questions for the second part of the written comprehensive exam evaluate the student's understanding of his or her major field of study. The questions are set and evaluated by members of the student's supervisory committee.
- Oral Examination Procedure: The oral component of the comprehensive exam is the defense of the student's dissertation proposal. The oral portion cannot be taken without successfully passing both written parts of the exam.

A Ph.D. student advances to candidacy after successfully passing all parts of the comprehensive examination.

## Dissertation

Dissertation Credits: The dissertation of a Ph.D. candidate is supervised by the chair or co-chairs of the student's supervisory committee in consultation with other members of the supervisory committee. While doing his or her dissertation, the candidate should take hours for the course CIST 9990 Dissertation in IT. A minimum of 24 hours of this course is required for graduation. Dissertation course credits should be taken only after the Ph.D. student advances to candidacy. Under special circumstances, Ph.D. students can take dissertation credits during the semester they apply for candidacy, but the dissertation credits taken under these circumstances should be kept to a minimum. Dissertation credits cannot be taken if the student does not pass the written part of the comprehensive exam.

IMPORTANT NOTE: The Graduate Catalog mentions that a minimum of seven months must elapse between the date of the Ph.D. student's advancement to candidacy and the date of his or her dissertation defense.

Scheduling Dissertation Defense : When the supervisory committee deems it appropriate for the Ph.D. candidate to defend his or her dissertation, the Ph.D. candidate should prepare a dissertation thesis and submit it to the supervisory committee members. While submitting the dissertation thesis to the supervisory committee, the candidate should also submit a final oral exam form to the Office of Graduate Studies. The final oral exam form requires the signatures of the supervisory committee members and the doctoral program committee chair, and should be submitted at least four weeks before the desired date of the dissertation defense. Supervisory committee members should sign this form after receiving the final draft of the dissertation.

IMPORTANT NOTE: Before scheduling his or her dissertation defense, the student should refer to the Office of Graduate Studies website and/or the current Graduate Catalog for the graduation checklist, thesis filing deadlines and commencement dates for the semester in which he or she plans to graduate.

## INFTPHD Exit Requirements:

## Completing Graduation Requirements

After successfully defending his or her dissertation, the student should complete a Report on Completion of Degree form and contact the Office of Graduate Studies to apply for graduation.

## Teaching Requirements

All Ph.D. students are required to teach at least ONE course while studying in the program.

Students who are assigned to teach a course will be designated as the instructor for a section of the course, and will be trained and evaluated by a mentor before teaching the course.

Method of Allocation: The steps for a student being allocated as a teaching assistant for a course are outlined below:

- The student will inform the DPC chair about the plan to teach a course along with a list of preferred courses
- If the student is teaching a course for the first time, this information should be sent TWO semesters before the semester in which the planned course is intended to be offered
- If the student has taught the course in the past, this information should be sent ONE semester before the semester in which the planned course is intended to be offered
- The DPC chair will consult with the unit chairs responsible for course scheduling to determine the need of instructors for different courses to make a suitable allocation
- The student will undergo mentorship under the faculty member responsible for teaching the course by attending the lectures and doing additional duties as determined by the mentor, ONE semester BEFORE the semester in which the planned course will be offered
- The student will be assigned as an instructor for the planned course, if, after undergoing the mentorship, the mentor determines the student is suitable for teaching the course

Timing of Teaching Activities: Teaching a course is an intense activity and can usually consume considerable time and effort. To avoid interference with his or her research work, a student should plan to teach a course, especially if teaching it for the first time, toward the beginning or midpoint of their Ph.D. studies. Students should plan to teach a course usually in the second or third year of studies.

## Residency Requirements

All full-time doctoral students must complete 24 hours within 18 months in order to meet the residency requirement of the University. Part-time students must complete 18 hours during the same period. The residency requirement ensures that progress toward the degree occurs within a reasonably compact time frame, enabling the doctoral student to integrate his or her course work with the dissertation.

## Progress Report

At the end of each semester, every doctoral student (fulltime or part-time) must complete the Progress Report form and submit it to the Director of the Doctoral Committee.

An electronic copy of this form is available on the Ph.D. website under the "Current Students/Forms" link.

## Satisfactory Progress

A minimum of three years of full-time graduate study is normally required to complete a doctoral program. The maximum time allowed by the Graduate School is eight years from the filing of the student's program of study in the Office of Graduate Studies. Students not making satisfactory progress will be counseled out of the program.

## Leave of Absence

Under extraordinary circumstances, e.g., medical problems, a student may request a leave of absence from the program for a period of no more than one year. The request must be submitted to and approved by the student's supervisory committee and/or Doctoral Program Committee. The request should include necessary modifications to the Plan of Study as a result of the leave.
The leave of absence stops the clock for the total time required for the program and the time required to meet the residency requirement. If a student withdraws in midsemester and is approved for a leave of absence, the clock starts at the beginning of the following semester. A student does not have to have met the residency requirement in order to apply for a leave of absence.
If a student does not return to the program within the one year approved for the leave of absence, then the student must submit an application to re-apply to the program. Readmission to the program is not guaranteed at that point. Please refer to the Graduate Catalog for the complete policy on a leave of absence.

For more information about the Ph.D. in Information Technology, please contact Dr. Raj Dasgupta at pdasgupta@unomaha.edu.
Program website at http://phd.ist.unomaha.edu.

## Total Credit Hours: 90

Language Teaching

## LANGUAGE TEACHING, M.A.

## Department of Foreign Languages, College of Arts \&

 Sciences
## Vision Statement

The Master of Arts in Language Teaching program at the University of Nebraska at Omaha is the only graduate program in the region that provides practicing and future teachers of Spanish, French, German, and English as a second or other language with a rigorous, practically oriented education founded on scholarship specifically in the pedagogy of language teaching. Students expand not only their familiarity with the latest research on applied
linguistics and effective instructional techniques but also the literature and culture of their language of focus. The program strives to strengthen language education in the region by equipping its students with the knowledge and skills to apply best pedagogical practices in world language and TESOL classrooms and by connecting area teachers via its annual colloquium on language teaching.

## Program Contact Information:

Dr. Carolyn Gascoigne, Graduate Program Chair (GPC)
Arts \& Sciences Hall (ASH) 301
402-554-2862
cgascoigne@unomaha.edu

## Program Website:

http://www.unomaha.edu/foreignlanguages/malt.php

## Application Deadlines:

- Fall: April 15
- Spring: November 15
- Summer: April 15


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 for written TOEFL
- 173 for computer-based TOEFL
- 61 for internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International students are required to have a minimum TOEFL score of 250 computer-based, 100 internetbased or a 68 PTE.
- Two (2) letters of recommendation
- Writing Sample
- For students pursuing a concentration in French, German, or Spanish, a written target-language sample of five to seven pages in length. Students may submit a paper prepared for an undergraduate
language class, or compose a new paper on any topic.
- For students pursuing a concentration in Teaching English to Speakers of Other Languages (TESOL), a five- to seven-page writing sample in English. Students may submit a paper prepared for an undergraduate English class, or compose a new paper on any topic.
- Applicant must have taken ENGL 3610: Introduction to Linguistics or an equivalent course. Those who do not meet this requirement may be admitted provisionally.
- An oral target-language sample via MP3 or WAV file is required. The target oral sample should be a simple description, three to five minutes in length, i.e., a description of one's family, job, an important event, etc.


## MA-LTCH DEGREE REQUIREMENTS

## MA-LTCH Required Courses:

Student must select an area of concentration.
See Language Teaching, M.A. Concentrations (p. 115)

## MA-LTCH Exit Requirements:

The final requirement of the degree for all four concentrations is the successful completion of a written and oral comprehensive examination in which linguistic and pedagogical knowledge is applied to the student's target language area.

## DEGREE REQUIREMENTS

## Total Credit Hours: 36

LANGUAGE TEACHING, M.A. CONCENTRATIONS

## FRENCH CONCENTRATION

## Requirements

FREN The Structure of French
8226/FREN
4220
TED
8006/TED
4000
FLNG 8960 Seminar: Special Topics 3
FREN 8440 Seminar: French Composition 3
FLNG 8020 Seminar: FL/TESOL Research 3
FLNG 8030 Seminar: Second Language 3
Acquisition Theory
FLNG 8040 Seminar: Assessment \& Curriculum 3
Design
Or
equivalent course approved by your

|  | advisor |  |
| :---: | :---: | :---: |
| FREN 8960 | Study Abroad | 3 |
| FREN 8966 | Pro-Seminar | - |
| The Study Abroad requirement may be replaced by 6 hours of additional coursework pending department approval. |  |  |
| Choose one from: |  |  |
| TED 8540 | Intro to Technology Tools for Learning | 3 |
| TED 8550 | Digital Multi-media in Learning | 3 |
| TED 8560 | Supporting Instructional Technology Environments | 3 |
| TED 8570 | Internet in the Learning Process | 3 |
| TED 8580 | Collaboration Tools in the Learning Process | 3 |
| TED 8590 |  | 3 |

Elective (3 hours in target language):
This course is approved in consultation with the Graduate advisor during the advising process.

## GERMAN CONCENTRATION

| Requirements |  |  |
| :---: | :---: | :---: |
| GERM | The Structure of German | 3 |
| 8226/GERM |  |  |
| 4220 |  |  |
|  | Literature Course/Literary Criticism | 3 |
| TED | Special Methods in the Content Area | 3 |
| 8006/TED |  |  |
| 4000 |  |  |
| FLNG 8960 | Seminar: Special Topics | 3 |
| GERM 8440 | Seminar: German Composition | 3 |
| FLNG 8020 | Seminar: FL/TESOL Research | 3 |
| FLNG 8030 | Seminar: Second Language | 3 |
|  | Acquisition Theory |  |
| FLNG 8040 | Seminar: Assessment \& Curriculum | 3 |
|  | Design |  |
|  | Or |  |
|  | equivalent course approved by your advisor | 3 |
| GERM 8960 | Study Abroad | 3 |
| GERM | Pro-seminar | 1 - |
| 8966/GERM |  | 3 |
| 4960 |  |  |
| The Study Abroad requirement may be replaced by 6 hours of additional coursework pending department approval. |  |  |
| Choose one from: |  |  |
| TED 8540 | Intro to Technology Tools for | 3 |
|  | Learning |  |
| TED 8550 | Digital Multi-media in Learning | 3 |
| TED 8560 | Supporting Instructional Technology | 3 |
|  | Environments |  |
| TED 8570 | Internet in the Learning Process | 3 |
| TED 8580 | Collaboration Tools in the Learning | 3 |

## Process

TED 8590

## Elective (3 hours in target language)

This course is approved in consultation with the Graduate advisor during the advising process.

## SPANISH CONCENTRATION

| Requirements |  |  |
| :---: | :---: | :---: |
| SPAN | The Structure of Spanish | 3 |
| 8226/SPAN |  |  |
| 4220 |  |  |
|  | Literature Course/Literary Criticism | 3 |
| TED | Special Methods in the Content Area | 3 |
| 8006/TED |  |  |
| 4000 |  |  |
| FLNG 8960 | Seminar: Special Topics | 3 |
| SPAN 8440 | Seminar: Spanish Composition | 3 |
| FLNG 8020 | Seminar: FL/TESOL Research | 3 |
| FLNG 8030 | Seminar: Second Language | 3 |
|  | Acquisition Theory |  |
| FLNG 8040 | Seminar: Assessment \& Curriculum | 3 |
|  | Design |  |
|  | Or |  |
|  | equivalent course approved by your advisor | 3 |
| SPAN 8960 | Study Abroad | 3 |
| SPAN | Pro-Seminar | 1 - |
| 8966/SPAN |  | 3 |
| 4960 |  |  |

The Study Abroad requirement may be replaced by 6 hours of additional coursework pending department approval.
Choose one from:

| TED 8540 | Intro to Technology Tools for | 3 |
| :--- | :--- | :--- |
|  | Learning |  |
| TED 8550 | Digital Multi-media in Learning | 3 |
| TED 8560 | Supporting Instructional Technology | 3 |
|  | Environments |  |
| TED 8570 | Internet in the Learning Process | 3 |
| TED 8580 | Collaboration Tools in the Learning | 3 |
| TED 8590 | Process | 3 |

## Elective (3 hours in target language)

This course is approved in consultation with the Graduate advisor during the advising process.

## TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES CONCENTRATION (TESOL)

## Requirements

ENGL Structure of English
8656/ENGL
4650
Writing Seminar

|  | Literature Semin |
| :---: | :---: |
| ENGL 8740 | Seminar: Discourse, Culture, and Power |
| TED | Special Methods in the Content Are |
| 8006/TED |  |
| FLNG 89 | Seminar: Special Topics |
| ENGL 8780 | Pedagogic Field Experience in TESOL |
| NG 802 | Seminar: FL/TESOL Research |
| FLNG 8030 | Seminar: Second Language Acquisition Theory |
| FLNG 8040 | Seminar: Assessment \& Curriculum Design <br> Or equivalent course approved by your advisor |
| Choose one from: |  |
| TED 8540 | Intro to Technology Tools for Learning |
| TED 8550 | Digital Multi-media in Learning |
| TED 8560 | Supporting Instructional Technology Environments |
| TED 8570 | Internet in the Learning Process |
| TED 8580 | Collaboration Tools in the Learning Process |
| TED 8590 |  |
| Elective (3 hours) |  |
| This course is approved in consultation with the Graduate advisor during the advising process. |  |
| Management Information Systems |  |
| MANAGEMENT INFORMATION SYSTEMS, M.S. |  |
| Department of Information Systems and Quantitative Analysis, College of I nformation Science \& Technology |  |
| Vision Statement |  |
| The Master of Science in Management Information Systems (MIS) degree is designed to give students the skills and background needed to develop and manage an organization's information resources, technology, and infrastructure. It will serve as a source of added knowledge and experience for MIS graduates and practitioners interested in obtaining an advanced degree. It will also provide career growth opportunities for the non-MIS and non-business degree holders who find that their careers demand graduate level MIS education. The MS in MIS prepares students for a variety of positions, including applications and web-site developer, computer network manager, business system analyst/manager, consultant, and technology manager. The MS in MIS also prepares |  |

students for admission to doctoral programs in information systems.

A community advisory committee helps keep the program current with the needs of the business community.

## Program Contact Information:

Dr. Peter Wolcott, Graduate Program Chair (GPC) Peter Kiewit Institute (PKI) 177E
402-554-3158
pwolcott@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu
Program Website:
http://www.isqa.unomaha.edu/home2.htm

## Application Deadlines:

- Fall: July 1
- Spring: December 1
- Summer: April 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the United States, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL scores.
- Paper-based TOEFL: 550
- Computer-based TOEFL: 213
- Internet-based TOEFL: 79
- IELTS: 6.5
- The minimum undergraduate grade point average requirement for the MS in MIS program is 2.80 or equivalent score on a 4.00 scale. Applicants should have the equivalent of a 4 -year undergraduate degree.
- Entrance Exam for those who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the United States, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit GMAT or GRE scores.
- There is no minimum GMAT (or GRE) requirement, but the applicant's score will be one factor used in evaluating the student's portfolio.
- Three (3) letters of recommendation
- Ask three references who can evaluate your work and/or academic achievements to write a letter of recommendation. You will specify need to provide contact information for these references during the on-line application, and they will automatically be given instructions on submitting the recommendation electronically.
- Writing Sample
- Applicants are required to submit a writing sample from work or previous academic experiences. Alternatively, if you do not have a writing sample, please submit a two page double-spaced word processed essay that addresses the following two topics:
- Discussion of two accomplishments that demonstrate your potential for success in the graduate program.
- Discussion of your unique personal qualities and life experiences that distinguish you from other applicants to our graduate program.
- Resume
- Submit a detailed resume indicating your work experience and background.

Students interested in taking courses without admission to the MS in MIS degree program may do so with permission of the Graduate Program Committee. Contact pwolcott@mail.unomaha.edu.

## FOUNDATION COURSES

Foundation courses ensure that all students in the MS MIS program have a strong foundation on which to build the rest of the program. These courses not only provide essential prerequisite knowledge and skills for other courses in the program, but they also contain a distinct
body of knowledge that is an important part of the MIS professional's education. All foundation courses are required for all students. However, students who have obtained an undergraduate MIS degree will typically already have this foundation. Other students, including computer science or engineering majors, will usually have to take one or more foundation courses. Occasionally, a student's work experience may be sufficient to waive one or more foundation courses.

Waivers for foundation courses are granted by the chair of the graduate program committee upon the recommendation of the faculty member who is responsible for an individual foundation course. Students requesting a waiver for a particular course should be prepared to meet with a faculty member and answer questions in the area of the course.
They should bring to the meeting any relevant transcripts, course syllabi, course material, or evidence of practical experience. Some foundation courses may have an option for testing out.

Foundation courses cannot be used to satisfy the 36 semester hours required for the MS in MIS degree. Students who have not completed all the foundation course requirements may be admitted on provisional status until those requirements have satisfactorily been completed. All must be completed prior to or concurrent with the first six hours of MS in MIS graduate course work.

| Six hours of programming coursework or equivalent <br> experience: |  |  |
| :--- | :--- | ---: |
| CIST 1400 | Introduction to Computer | 3 |
| CSCI 1620 | Programming <br> Introduction to Computer Science II | 3 |

or equivalent
One of the following:
CIST 2500 Introduction to Applied Statistics for 3 IS\&T.
OR
one semester of undergraduate
statistics
One of the following:
$\begin{array}{ll}\text { CIST } 2100 & \begin{array}{l}\text { Organizations, Applications and } \\ \text { Technology }\end{array} \\ \text { or equivalent } & \end{array}$
One of the following:
ISQA 8040 An Overview of Systems 3
Development
OR
ISQA 4110 Information Systems Analysis
And
ISQA 4120 System Design and Implementation
or equivalent
One of the following:
ISQA 8050 Data Organization and Storage

| ISQA 3300 | or <br> File Structures for Information <br> Systems |
| :--- | :--- |
| And |  |
| And 3310 | Managing the Data Base <br> Environment |
| or equivalent |  |

## MISMS DEGREE REQUIREMENTS

MISMS Required Courses ( 21 hours):
IT IS HIGHLY RECOMMENDED THAT YOU TAKE THE CORE COURSES BEFORE YOU TAKE ELECTIVES. TAKE ISQA 8310 - DATA COMMUNICATIONS AS EARLY AS POSSIBLE IN
YOUR PROGRAM, provided you have met the prerequisite of CIST 2100 or equivalent.
ISQA 8060 Research in MIS
ISQA 8210 Management of Software Development
ISQA 8220 Advanced Systems Analysis and Design
ISQA 8310 Data Communications
ISQA 8380 Managing the Distributed
Computing Environment
ISQA 8410 Database Management
ISQA 8420 Managing the IS Function

## Earn a total of $\mathbf{1 5}$ credit hours with a number $\mathbf{8 0 0 0}$ or above

(excluding foundation courses listed in the admissions requirements).
The $\mathbf{1 5}$ credits must include $\mathbf{6}$ credit hours from among the following:
ISQA 8080 Seminar in Management Information 1 -
ISQA 8016 Systems In
ISQA 8106 Information Systems Architecture 3 and Organization
ISQA Advanced Statistical Methods for
8156/ISQA IS\&T
4150
ISQA 8160 Applied Distribution Free Statistics
ISQA 8180 Electronic Commerce
ISQA 8196 Process Reengineering with Information Technology
ISQA Information and Data Quality
8206/ISQA
4200
ISQA Telecommunications Management
8230/CSCI
8220
ISQA 8240
Telecommunications Planning,
Analysis and Design
ISQA

| 8306/ISQA |  |  |
| :---: | :---: | :---: |
| 4300 |  |  |
| ISQA 8340 | Applied Regression Analysis | 3 |
| ISQA 8400 | Clinical Systems Architecture and Function | 3 |
| ISQA 8510 | Managing Usability Functions in Systems Development Organiz. | 3 |
| ISQA | Graphical User Interface | 3 |
| 8525/ISQA |  |  |
| 3520 |  |  |
| ISQA 8530 | E-Commerce Security | 3 |
| ISQA | Computer Security Management | 3 |
| 8546/CIST |  |  |
| 4540 |  |  |
| ISQA 8560 | Information Warfare and Security | 3 |
| ISQA 8570 | Information Security Policy and Ethics | 3 |
| ISQA 8580 | Security Risk Management and Assessment | 3 |
| ISQA | IT Audit and Control | 3 |
| 8596/ISQA |  |  |
| 4590 |  |  |
| ISQA 8700 | Data Warehousing: Theory and Practice | 3 |
| ISQA 8736 | Decision Support Systems | 3 |
| ISQA 8810 | Information Technology Project | 3 |
|  | Fundamentals |  |
| ISQA 8820 | Project Risk Management | 3 |
| ISQA 8900 | Independent Research in | 1 |
|  | Management Information Systems | 3 |

ISQA 8080:May be repeated, but no topic more than once ISQA 8900: May be repeated for a maximum of 6 hours

## MISMS Concentrations:

See Management Information Systems, M.S.
Concentrations (p. 120)
MISMS Exit Requirements:
ISQA 8990 Thesis
OR
ISQA 8950 Capstone Management Information 3 Systems

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms, and final approval and submission of the thesis.

Transfer students may request permission to transfer as many as nine (9) semester hours of credit on a 36-hour program provided the courses are pertinent to the student's graduate program. Submit petitions to the MS in MIS Director (PKI 177-E) for transfer credit and include a syllabus for each course to be transferred.
The Graduate College's Quality of Work standards shall be applied to foundation courses as well as courses taken as
part of the degree program. In particular, the GPC will recommend to the Graduate College that any

1. Student receiving a grade of "C-" or below in any foundation courses will be automatically dismissed from the program or, in the case of unclassified or nondegree students, be automatically denied admission.
2. Student receiving a grade of " $\mathrm{C}+$ " or " C " in any foundation course will be placed on probation or dismissed from the program.
3. Student not maintaining a " $B$ " ( 3.0 on 4.0 scale) average in foundation courses will be placed on probation or dismissed from the program.
Students have 7 years to complete their MS in MIS degree. The 7-year time limit starts with the first degree-program class on the plan of study.

## MISMS-Other Program Related Information:

The College of IS\&T offers an integrated undergraduate/graduate (IUG) track in MIS to provide outstanding undergraduate students in the College of IS\&T an option to complete the BS (undergraduate) degree in MIS and the MS (graduate) degree in MIS in five years (147 total hours). The IUG program is designed for dedicated students who are motivated and willing to take on the challenges relating to graduate education earlier than other students do. As such, the program involves both intensive study and preparation in the MIS field. Students interested in this option will work closely with an advisor and a faculty mentor to develop an integrated plan of study.
The College of IS\&T wishes to extend its relationship with Management Center Innsbruck (Austria) (MCI) and with the Technical University of Braunschweig (Germany) (TUB) by offering a small number of interested students the opportunity to receive both the MS in MIS (UNO) degree and the MA in Management, Communications and Information Technology (MCiT) (MCI) or the Masters in MIS (TUB) degree in a two-year, full-time equivalent period. This will be implemented as an international dual degree track within the MS in MIS degree with an articulation of courses that will be transferred in both directions. The international dual degree track, like the traditional MS in MIS program, will require the equivalent of 36 US credit hours of course work beyond any foundation requirements. Students who wish to pursue this option will work closely with an advisor to develop a detailed plan of study.
Total Credit Hours: 36

## MANAGEMENT INFORMATION SYSTEMS, M.S. CONCENTRATIONS

The ISQA faculty has developed a set of concentrations to assist students as they work to complete the MS in MIS
program. Concentrations consist of coordinating elective courses. Students may choose to take courses that make up a concentration, or not, as they see fit. Concentrations are not minors in the traditional sense, but rather reflect areas in demand in the community. If you have any questions regarding these concentrations, please contact the MS in MIS graduate advisor.

## APPLIED RESEARCH METHODS IN MIS CONCENTRATION

Required Course (3 hours):
ISQA
Advanced Statistical Methods for 3
8156/ISQA IS\&T
4150

## Electives (6 hours)

Select two courses from the following list:
ISQA 8160 Applied Distribution Free Statistics 3
ISQA 8340 Applied Regression Analysis 3
ISQA 8080 Seminar in Management Information 1 Systems 5
ISQA 8990 Thesis 3
ISQA 8080: Topic MUST be related to research design or statistics. Prior approval from the Graduate Program Committee is required to use this course in the concentration.

ISQA 8990: Research MUST be related to research design or statistics. Approval from the Graduate Program Committee is required to use this course in the concentration. Only three hours of the required six hours of thesis credit may be applied to the concentration.

## Free Elective (3 hours):

A total of 3 credit hours with a number 8000 or above (excluding foundation courses listed in the admissions requirements).

## DATA MANAGEMENT CONCENTRATION

The effective management of data and information is a fundamental task not only in the information society, but also for civilization as a whole. This concentration will prepare students to manage a growing variety of types of data throughout the data lifecycle. The curriculum gives students theoretical and practical training in database design, database administration, data quality management, knowledge management, business intelligence, data integration, and data governance. Students will gain exposure to transaction processing systems, data warehouses, and XML data stores. Students may also gain experience managing geospatial data.

## Prerequisite Course ( 3 hours; core course in MS MIS program): <br> ISQA 8410 Database Management

Required Courses (9 hours):
ISQA
Information and Data Quality

| 8206/ISQA | Management |
| :--- | :--- |
| 4200 |  |
| ISQA | Database Administration |
| 8306/ISQA |  |
| 4300 |  |
| ISQA 8700 | Data Warehousing: Theory and |
|  | Practice |

## Electives ( $\mathbf{3}$ hours; select 1 course):

(GEOG 8535 and GEOG 8545 are taken together)
ISQA 8016 Business Intelligence

GEOG Cartography \& GIS
8535/GEOG
3530
GEOG 8545
GEOG
8056/GEOG
4050
ISQA 8080
Seminar in Management Information Systems
ISQA 8990 Thesis
ISQA 8080: Topic MUST be related to data management. Prior approval from the Graduate Program Committee is required to use this course in the concentration.

ISQA 8990: Research MUST be related to data management. Approval from the Graduate Program Committee is required to use this course in the concentration. Only three hours of the required six hours of thesis credit may be applied to the concentration.
GEOG 8535/GEOG 8545: (2 Credit Hours + 2 Credit Hours Lab)

## Free Elective:

A total of 3 hours with a number 8000 or above (excluding foundation courses listed in the admissions requirements).

## ELECTRONIC COMMERCE CONCENTRATION

Students interested in Electronic Commerce are encouraged to declare a formal concentration by contacting the graduate advisor. For an Electronic Commerce concentration, the 12 required credit hours of electives must include the following nine credit hours:

## Required Course:

ISQA 8180 Electronic Commerce
Electives (Select two courses from the following list):
ISQA 8196 Process Reengineering with 3

ISQA Graphical User Interface 3
8525/ISQA
3520
ISQA 8530
E-Commerce Security Data Warehousing: Theory and

|  | Practice |  |
| :--- | :--- | ---: |
| ISQA 8080 | Seminar in Management Information | $1-$ |
|  | Systems | 5 |
| ISQA 8990 | Thesis | 3 |

ISQA 8080: Topic MUST be related to e-commerce. Prior approval from the Graduate Program Committee is required to use this course in the concentration.

ISQA 8990: Research MUST be related to e-commerce. Approval from the Graduate Program Committee is required to use this course in the concentration. Only three hours of the required six hours of thesis credit may be applied to the concentration.

## Free Elective:

A total of 3 credit hours with a number 8000 or above (excluding foundation courses listed in the admissions requirements).

## GEOGRAPHIC INFORMATION SYSTEMS CONCENTRATION

The use of spatial data for management, analysis, and decision-making has grown dramatically in both the public and private sectors, as global positioning systems, mobile devices, and geographic information systems (GIS) have become widespread. The concentration in GIS provides students with the technical and conceptual skills to manage geospatial data and apply it to solving geospatial problems. Students will learn the principles of geospatial data and mapping systems, global positioning systems, representation and management of geospatial data within computer systems, construction and use of maps, and the use of geospatial functions for decision-support.
Required Courses ( $\mathbf{1 5}$ hours):
GEOG Cartography \& GIS
8535/GEOG
3530
GEOG 8545 Cartography \& GIS Lab 2
GEOG Geographic Information Systems I
8056/GEOG
4050
GEOG Geographic Information Systems II 4
8666/GEOG
4660
ISQA 8736 Decision Support Systems 3

## HEALTH INFORMATICS CONCENTRATION

Students interested in health informatics are encouraged to declare a formal concentration by contacting the MS in MIS advisor. The health informatics concentration integrates MIS, medical informatics theories and methods, and medical data representation and coding requirements. Students selecting this concentration are strongly encouraged to choose the thesis option to enhance their opportunities for obtaining gainful employment in this field. Students accepted into this concentration are
expected to have prior experience or education in the life sciences and allied disciplines such as pharmacy, medicine and nursing. Students are to start coursework in the health informatics concentration after completion of the core courses. For a health informatics concentration, 15 credit hours of electives are required as follows:

Required Courses ( 12 hours):

| ISQA 8570 | Information Security Policy and <br> Ethics | 3 |
| :--- | :--- | :--- |
| Select one of the following: |  |  |
| PA 8760 | The U.S. Health Care System |  |
| PSM 810 | US Health Care System: An <br> Overview | 3 |
| Select one of the following: |  |  |
| ISQA 8400 | Clinical Systems Architecture and | 3 |
| IMED 840 | Function <br> Clinical Systems Architecture and <br> Function | 3 |

The two courses above are prerequisites for the following:
ISQA 8500 Readings in Clinical Informatics
SURG 850 Readings in Clinical Informatics

## Elective (3 hours):

Note: This is not an exhaustive list. Other courses may be taken as electives with approval of the Chair, Graduate Program Committee.
ISQA
8525/ISQA
3520
ISQA 8196
Graphical User Interface

Information Technology
ISQA 8700 Data Warehousing: Theory and Practice
ISQA 8080 Seminar in Management Information 1 Systems 5
ISQA 8900 Independent Research in 1 Management Information Systems 3
ISQA 8990 Thesis 3
ISQA 8080: (Topic MUST be related to health informatics. Prior approval from the Graduate Program Committee is required to use this course in the concentration.)

ISQA 8900: (Topic MUST be related to health informatics. Prior approval from the Graduate Program Committee is required to use this course in the concentration.)
ISQA 8990: (Research MUST be related to health informatics. Approval from the Graduate Program Committee is required to use this course in the concentration. Only three hours of the required six hours of thesis credit may be applied to the concentration.)

## INFORMATION ASSURANCE CONCENTRATION

The Information Assurance (IA) concentration focuses on the planning, deployment, and management of security technologies to achieve information assurance. Students interested in Information Assurance are encouraged to declare a formal concentration by contacting the graduate advisor. For an Information Assurance concentration, the 12 required credit hours of electives must include the following:
Required Courses (9 hours):
ISQA
Computer Security Management
8546/CIST
4540
ISQA 8570
ISQA 8580
Information Security Policy and Ethics
Security Risk Management and 3

Electives (select one of the following courses; $\mathbf{3}$ hours):
ISQA 8530 E-Commerce Security
ISQA 8560 Information Warfare and Security 3
ISQA 8080 Seminar in Management Information 1 Systems
ISQA 8900 Independent Research in 1 -
Management Information Systems 3
ISQA 8990 Thesis 3
ISQA 8900: (Topic MUST be related to information assurance. Prior approval from the Graduate Program Committee is required to use this course in the concentration.)
ISQA 8990: (Research MUST be related to information assurance. Approval from the Graduate Program Committee is required to use this course in the concentration. Only three hours of the required six hours of thesis credit may be applied to the concentration.)

## IT AUDIT AND CONTROL CONCENTRATION

The IT Audit and Control concentration will provide students with the technical, organizational, accounting/auditing, and managerial background to plan and conduct IT audit and control activities. The concentration will cover the following conceptual areas: business risks and the management of business risk, IT risk as a component of business risk, the need to manage IT risks, basic type of controls required in a business system in order to control IT risks, controls associated with top management, system development, programming, data resource management, database, security, operations management, quality assurance, boundary controls, and communications. Issues associated with new system control risks created by the use of the internet for business applications and electronic business will also be covered in one or more courses. Students will learn and apply and integrate technical, managerial and conceptual skills
needed to plan and conduct IT audits and establish appropriate controls. For an IT Audit and Control concentration, the 12 to 15 required credit hours of electives must include the following courses.

## Prerequisite Courses:

Students must have completed at least 9 hours of the MS in MIS core courses (beyond foundation requirements) prior to enrolling for the concentration. In addition, the following preparation is required for this concentration: BSAD 8110 Accounting and Financial Fundamentals
(This course is only required for students who have had no exposure to accounting fundamentals. Students will be given an automatic waiver if they have taken two semesters of accounting in their undergraduate degree.)
Required Courses (9 hours):
BSAD 8200 Managerial Accounting
ISQA 8570 Information Security Policy and Ethics
ISQA
IT Audit and Control
8596/ISQA
4590

## Electives (Select two courses from the following list):

NOTE: This is not an exhaustive list. Other courses may be taken as electives with approval of the GPC Chairperson.

| ISQA 8080 | Seminar in Management | $1-$ |
| :--- | :--- | ---: |
|  | Information Systems | 5 |
| ISQA | Computer Security Management | 3 |
| 8546/CIST |  |  |
| 4540 |  | 3 |
| ISQA 8196 | Process Reengineering with |  |
|  | Information Technology | 3 |
| ACCT 8060 | Advanced Managerial Accounting | 3 |
| ACCT | Information Systems Auditing | 3 |
| 8096/ACCT |  |  |
| 4090 |  | $1-$ |
| ISQA 8900 | Independent Research in | 3 |
|  | Management Information Systems | 3 |
| ISQA 8990 | Thesis |  |

ISQA 8080: (Topic MUST be related to IT audit and control. Prior approval from the Graduate Program Committee is required to use this course in the concentration.)

ACCT 8096: (Requires ACCT 4080 - Principles of Auditing)
ISQA 8900: (Topic must be related to IT audit and control. Prior approval from Graduate Program Committee is required to use this course in the concentration.)
ISQA 8990: (Research MUST be related to IT audit and control. Approval from the Graduate Program Committee is required to use this course in the concentration. Only
three hours of the required six hours of thesis credit may be applied to the concentration.)

## PROJECT MANAGEMENT CONCENTRATION

The Project Management concentration will provide students with the technical, organizational and managerial background to be effective project managers, project leaders, information technology managers, and software engineers. The curriculum in this concentration integrates project management standards developed by organizations such as IEEE (The Institute of Electrical and Electronics Engineers) and PMI (Project Management Institute) with conceptual background from disciplines such as project management, software engineering, management science, psychology, organization behavior, and organization change. Students are to start coursework in the project management concentration after completion of at least 9 hours of the core courses, including ISQA 8210 (Management of Software Development). For a Project Management concentration, the 15 required credit hours of electives must include the following courses.

## Required Courses ( 6 hours):

ISQA 8810 Information Technology Project 3
Fundamentals
ISQA 8820 Project Risk Management

## Electives (6 hours)

select two courses from the following list:
NOTE: This is not an exhaustive list. Other courses may be taken as electives with approval of the GPC Chairperson.
ISQA 8570 Information Security Policy and 3
Ethics
ISQA 8196 Process Reengineering with 3
Information Technology
ISQA 8080 Seminar in Management Information 1 Systems

5
ISQA 8900 Independent Research in 1 -
Management Information Systems 3
ISQA 8990 Thesis 3
ISQA 8080: (Topic MUST be related to Project
Management. Prior approval from the Graduate Program Committee is required to use this course in the concentration.)
ISQA 8900: (Topic must be related to Project
Management. Prior approval from Graduate Program Committee is required to use this course in the concentration.)
ISQA 8990: (Research MUST be related to Project Management. Approval from the Graduate Program Committee is required to use this course in the concentration. Only three hours of the required six hours of thesis credit may be applied to the concentration.)

## Free Elective (3 hours):

A total of 3 credit hours with a number 8000 or above (excluding foundation courses listed in the admissions requirements).

## TELECOMMUNICATIONS CONCENTRATION

Students interested in Telecommunications are encouraged to declare a formal concentration by contacting the graduate advisor. For a Telecommunications concentration, the 12 required credit hours of electives must include the following nine credit hours:

| Required Course (3 hours): |  |  |
| :---: | :---: | :---: |
| ISQA | Telecommunications Management | 3 |
| 8230/CSCI |  |  |
| 8220 |  |  |
| Electives (Select two courses from the following list; 6 hours): |  |  |
| IASC 8410 | Distributed System and Network | 3 |
|  | Security |  |
| ISQA 8530 | E-Commerce Security | 3 |
| CSCI 8200 | Interconnection Networks | 3 |
| CSCI 8210 | Advanced Communication Networks | 3 |
| CSCI 8556 | Communication Networks | 3 |
| ISQA 8080 | Seminar in Management Information | 1 - |
|  | Systems | 5 |
| ISQA 8990 | Thesis | 3 |

ISQA 8080: (Topic MUST be related to
Telecommunications. Prior approval from the Graduate Program Committee is required to use this course in the concentration.)
ISQA 8990: (Research MUST be related to Telecommunications. Approval from the Graduate Program Committee is required to use this course in the concentration. Only three hours of the required six hours of thesis credit may be applied to the concentration.)

## Free Elective (3 hours):

A total of 3 credit hours with a number 8000 or above (excluding foundation courses listed in the admissions requirements).

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*** Redirect Link ***
*** MBA-MIS ***
*** Redirect Link ***
*** MPA-MIS ***
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## PROJECT MANAGEMENT CERTIFICATE

Department of Information Systems and Quantitative Analysis, College of Information Science \& Technology

## Vision Statement

The goal of the ISQA graduate certificate program is to allow post-baccalaureate students and working professionals to expand their educational background and complete work that could count towards a graduate degree.

Earning the graduate certificate will enhance skill sets; provide exposure to new information technologies, theories and practices; allow individuals to work towards various professional certifications; increase growth potential with employers; and increase prospects of obtaining a graduate degree. The graduate certificate programs offer existing technical and managerial professionals the chance to improve and hone their communication skills to aide in their professional development.

The Project Management Certificate will provide students with the technical, organizational and managerial background to become project managers, project leaders, information technology managers, and software engineers.

## Program Contact Information:

Dr. Peter Wolcott, Graduate Program Chair (GPC) Peter Kiewit Institute (PKI) 177E
402-554-3158
pwolcott@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu
Program Website:
http://www.isqa.unomaha.edu/home2.htm

## Application Deadlines:

- Fall: July 1
- Spring: December 1
- Summer: April 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the United States, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL scores.
- Paper-based TOEFL: 550
- Computer-based TOEFL: 213
- Internet-based TOEFL: 79
- IELTS: 6.5
- The minimum undergraduate grade point average requirement for the MS in MIS program is 2.80 or equivalent score on a 4.00 scale. Applicants should have the equivalent of a 4 -year undergraduate degree.


## CERT-PJMT DEGREE REQUIREMENTS

## Undergraduate deficiency requirements must be completed with grades of ' $B$ " or better:

| CIST 2100 | Organizations, Applications and <br> Technology | 3 |
| :--- | :--- | :--- |
| ISQA 8040 | An Overview of Systems <br> Development | 3 |

ISQA 8050 Data Organization and Storage 3
$\begin{array}{lcl}\text { Cert-PJMT Required Courses ( } \mathbf{9} \text { hours): } \\ \text { ISQA } 8210 & \text { Management of Software }\end{array}$ Development
ISQA 8810 Information Technology Project Fundamentals
ISQA 8820 Project Risk Management 3
Cert-PJMT Electives (3 hours):
ISQA 8196 Process Reengineering with 3
ISQA 8220 Advanced Systems Analysis and 3 Design
ISQA 8420 Managing the IS Function 3
ISQA 8900 Independent Research in 1 Management Information Systems 3
ISQA 8080 Seminar in Management Information 1 Systems

ISQA 8900:(must be related to project management)
ISQA 808: (must be related to project management)

## Cert-PJMT-Other Program-Related Information:

## Completion of the Certificate

During what is expected to be the semester the certificate is completed and prior to the posted deadline, students should apply for the certificate through mavlink on or before the deadline. Information can be found at:
http://www.ses.unomaha.edu/registrar/graduate.php. If you complete the application form and do not complete all of
the requirements for the certificate, contact the Office of Graduate Studies as soon as possible. You must reapply during the next semester in which you expect to complete the certificate; no additional fee is charged to reactivate your application.

The following requirements are due 12 working days prior to commencement:

- "Incomplete" and "NR" grades from previous terms must be removed so that the grade will be in the Office of Graduate Studies.
- All fees, fines, and other obligations due the university must be settled.

For students currently enrolled in courses that are a part of their plan of study, enrollment must be maintained in order to complete the certificate. A grade for any current enrollment must be received by the Registrar's Office no later than the close of business on the fifteenth working day following the end of a semester.

## Awarding of Graduate Certificates

The Office of Graduate Studies will mail the certificate to students when all requirements are completed and all obligations to the university are satisfied. The Graduate College will not approve any changes in the student's permanent record once the certificate is awarded.
Total Credit Hours: 12

## SYSTEMS ANALYSIS AND DESIGN CERTIFICATE

Department of Information Systems and Quantitative Analysis, College of Information Science \& Technology
Vision Statement
The goal of the ISQA graduate certificate program in Systems Analysis \& Design is to allow post-baccalaureate students and working professionals to expand their educational background and complete work that could count towards a graduate degree. Earning the graduate certificate will enhance students' skill sets; provide exposure to new information technologies, theories and practices; allow individuals to work towards various professional certifications; increase growth potential with employers; and increase prospects of obtaining a graduate degree. The graduate certificate program offers existing technical and managerial professionals the chance to improve and hone their communication skills to aide in their professional development.

The Systems Analysis and Design Certificate will provide students with the advanced technical, organizational and managerial background to become systems or business analysts and software developers.

## Program Contact Information:

Dr. Peter Wolcott, Graduate Program Chair (GPC)
Peter Kiewit Institute (PKI) 177E
402-554-3158
pwolcott@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu
Program Website:
http://www.isqa.unomaha.edu/home2.htm

## Application Deadlines:

- Fall: July 1
- Spring: December 1
- Summer: April 1

Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major
Program-Specific Requirements:
- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the United States, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL scores.
- Paper-based TOEFL: 550
- Computer-based TOEFL: 213
- Internet-based TOEFL: 79
- IELTS: 6.5
- The minimum undergraduate grade point average requirement is 2.80 or equivalent score on a 4.00 scale. Applicants should have the equivalent of a 4-year undergraduate degree.


## CERT-SY AD DEGREE REQUIREMENTS

Undergraduate deficiency requirements must be completed with grades of " $B$ " or better:
CIST 2100 Organizations, Applications and 3 Technology
ISQA 8040 An Overview of Systems 3
Development
ISQA 8050 Data Organization and Storage 3
Cert-SYAD Required Courses ( 9 hours):
ISQA 8210 Management of Software 3
Development
ISQA 8220 Advanced Systems Analysis and 3 Design
ISQA 8410 Database Management
Cert-SYAD Electives (3 hours):
ISQA 8420 Managing the IS Function 3
ISQA 8106 Information Systems Architecture 3
and Organization
ISQA 8900 Independent Research in 1-
Management Information Systems 3
ISQA 8080 Seminar in Management Information 1 -
Systems 5

ISQA 8900 (must be related to systems analysis \& design)
ISQA 8080 (must be related to systems analysis \& design)

## Cert-SYAD-Other Program-Related Information:

## Completion of the Certificate

During what is expected to be the semester the certificate is completed and prior to the posted deadline, students should apply for the certificate through mavlink on or before the deadline. Information can be found at:
http://www.ses.unomaha.edu/registrar/graduate.php. If you complete the application form and do not complete all of the requirements for the certificate, contact the Office of Graduate Studies as soon as possible. You must reapply during the next semester in which you expect to complete the certificate; no additional fee is charged to reactivate your application.
The following requirements are due 12 working days prior to commencement:

- "Incomplete" and "NR" grades from previous terms must be removed so that the grade will be in the Office of Graduate Studies.
- All fees, fines, and other obligations due the university must be settled.
For students currently enrolled in courses that are a part of their plan of study, enrollment must be maintained in order to complete the certificate. A grade for any current enrollment must be received by the Registrar's Office no
later than the close of business on the fifteenth working day following the end of a semester.


## Awarding of Graduate Certificates

The Office of Graduate Studies will mail the certificate to students when all requirements are completed and all obligations to the university are satisfied. The Graduate College will not approve any changes in the student's permanent record once the certificate is awarded.

## Total Credit Hours: 12

*** Redirect Link ***
*** Management-Information-Systems-Minor ***

## Mathematics

MATHEMATICS, M.A.

## Department of Mathematics, College of Arts \& Sciences

## Vision Statement

The Master of Arts in Mathematics is designed to achieve two objectives:

- Provide a strong program of course work in mathematics beyond the undergraduate level and
- Be flexible enough to accommodate a wide variety of student interests and backgrounds. There are no required courses in the program, but students are strongly encouraged to develop an emphasis in the courses which make up their individual plan of study; such an emphasis provides both focus and depth in the graduate experience.
Whatever their objectives in their graduate programs, students should form a close working relationship with a faculty member having similar mathematical interests as soon as possible. This will ensure good advice in planning a coherent plan of study. In addition, an advisor may be able to suggest special topics courses, independent study, or the thesis option which could all be used to pursue one's interests in greater depth.
Finally, students who plan to pursue a doctoral degree in mathematics should include a sequence in analysis and a sequence in algebra in their plans of study.


## Program Contact Information:

Dr. Steven From
Durham Science Center (DSC) 236
402-554-3622
sfrom@unomaha.edu

## Program Website:

http://www.unomaha.edu/math/grad/

## Application Deadlines:

- Fall: July 31
- Spring: November 30
- Summer: April 15


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

For unconditional admission, an applicant should:

1. Have completed a bachelor's degree with a grade point average of at least 3.0 in mathematics courses taken.
2. Have completed 15 credit hours of mathematics courses beyond calculus, including MATH 3230/8235 Introduction to Analysis or equivalent.
3. Students lacking the 15 credit hours beyond calculus may be eligible for admission in a provisional or unclassified status with a deficiency to be made up in addition to the degree requirements listed.
4. Students who satisfy the admission requirements in (1) above except for the GPA requirement may be granted provisional admission to the graduate program. They will be granted unconditional admission upon completion of 12 graduate hours with a grade of " B " or better in each course.

## MA-MATH DEGREE REQUIREMENTS

## MA-MATH Required Courses:

There are no required courses, Choose mathematics courses with a number of 8000 or above and ending in the digit zero or six and excluding $8010,8020,8040,8806$, and 8880. At least fifteen of these hours must be in courses with a number ending in the zero digit. These fifteen hours may include the six hours of thesis and three hours of independent study, MATH 8970.

## MA-MATH Electives:

Since all courses are electives with the exception of the six thesis credit hours, all courses taken must satisfy the above requirements for the 30 credit hours. Up to 12 hours of graduate work electives may be taken in areas related to mathematics such as physics, computer science, and economics, if permission is obtained from the Graduate Program Committee.

## MA-MATH Exit Requirements: <br> MATH 8990 Thesis

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms, and final approval and submission of the thesis.

## Pass a comprehensive examination

## MA-MATH-Other Program-Related Information:

Courses numbered 8--5 will not count towards the MS degree in Mathematics.

## Graduate Assistantships:

The mathematics department annually awards graduate assistantships for work within the department. There are also several joint UNO/MCC positions where the teaching assignments are at Metropolitan Community College. All of these positions pay an annual stipend plus a waiver of tuition. For the details of the nature of the work, please contact the department chair.
Total Credit Hours: 30
MATHEMATICS, M.S.

## Department of Mathematics, College of Arts \& Sciences

## Vision Statement

The Master of Science in mathematics is designed to achieve two objectives:

- Provide a strong program of course work in mathematics beyond the undergraduate level and
- Be flexible enough to accommodate a wide variety of student interests and backgrounds. There are no required courses in the program, but students are strongly encouraged to develop an emphasis in the courses which make up their individual plan of study; such an emphasis provides both focus and depth in the graduate experience.

Whatever their objectives in their graduate programs, students should form a close working relationship with a faculty member having similar mathematical interests as soon as possible. This will ensure good advice in planning
a coherent plan of study. In addition, an advisor may be able to suggest special topics courses, independent study, or the thesis option which could all be used to pursue one's interests in greater depth.
Finally, students who plan to pursue a doctoral degree in mathematics should include a sequence in analysis and a sequence in algebra in their plans of study.

## Program Contact Information:

Dr. Steven From
Durham Science Center (DSC) 236
402-554-3622
sfrom@unomaha.edu

## Program Website:

http://www.unomaha.edu/math/grad/

## Application Deadlines:

- Fall: July 31
- Spring: November 30
- Summer: April 15


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 for the written TOEFL
- 173 for the computer-based TOEFL
- 61 for the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

For unconditional admission, an applicant should:

1. Have completed a bachelor's degree with a grade point average of at least 3.0 in mathematics courses taken.
2. Have completed 15 credit hours of mathematics courses beyond calculus, including MATH 3230/MATH 8235 Introduction to Analysis or equivalent.
3. Students lacking the 15 credit hours beyond calculus may be eligible for admission in a provisional or
unclassified status with a deficiency to be made up in addition to the degree requirements listed.
4. Students who satisfy the admission requirements in (1) above except for the GPA requirement may be granted provisional admission to the graduate program. They will be granted unconditional admission upon completion of 12 graduate hours with a grade of " B " or better in each course.

## MS-MATH DEGREE REQUIREMENTS

## MS-MATH Required Courses:

There are no required courses. However, students must choose courses numbered 8000 or above and ending in the digit zero or six, excluding 8010, 8020, 8040, and 8880. At least 18 of these credit hours must be in courses with a number ending in a zero digit.

## MS-MATH Electives:

Since there are no required courses, all courses are electives which must satisfy the requirements given above for the 36 credit hours. Up to 12 hours of graduate work electives may be taken in areas related to mathematics, physics, computer science, and economics, if permission is obtained from the Graduate Program Committee.

## MS-MATH Exit Requirements:

Comprehensive Examination
The comprehensive examination is based on three related courses (one of which must have a number ending in a zero digit) consisting of two parts. The first part is a 3-hour examination which may be open book. The second part is a one-week take-home examination. The examination is normally taken in the semester immediately preceding graduation and should be scheduled well in advance of the graduate college deadlines

## MS-MATH-Other Program-Related Information:

Courses numbered 8--5 will not count towards the MS degree in Mathematics.

## Graduate Assistantships:

The mathematics department annually awards graduate assistantships for work within the department. There are also several joint UNO/MCC positions where the teaching assignments are at Metropolitan Community College. All of these positions pay an annual stipend plus a waiver of tuition. For the details of the nature of the work, please contact the department chair.
Total Credit Hours: 36
MATHEMATICS, M.A.T.

## Department of Mathematics, College of Arts \& Sciences

## Vision Statement

The Master of Arts for Teachers of Mathematics degree is ideal for those who are planning on teaching advanced secondary mathematics such as Dual-Enrollment calculus or freshman/sophomore level mathematics courses at local universities. Additionally, the program provides a solid masters-level foundation for those who are pursuing a Ph.D. in Education with an emphasis in mathematics.

## Program Contact Information:

Dr. Michael Matthews, Graduate Program Chair (GPC) Durham Science Center (DSC) 231
402-554-3558
michaelmatthews@unomaha.edu

## Program Website:

http://www.unomaha.edu/math/grad/

## Application Deadlines:

Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Have obtained at least a "B" ( 3.0 on a 4.0 scale) average in previous mathematics courses, including two courses beyond elementary calculus.
- Hold state certification for teaching secondary school mathematics
- Have taken a programming language at the college level

| MATHMTM DEGREE REQUIREMENTS |  |  |
| :---: | :---: | :---: |
| MATHMTM Required Courses (36 hours): |  |  |
| MATH | Algorithmic Combinatorics | 3 |
| 8060/CSCI |  |  |
| 8060 |  |  |
| MATH | Mathematical Analysis I | 3 |
| 8236/MATH |  |  |
| 4230 |  |  |
| MATH 8036 | Applied Modern Algebra | 3 |
| MATH 8020 | Topics in Geometry and Topology | 3 |
| MATH 8040 | Topics in Computer Science | 3 |
| Complete three approved education courses for graduate students only |  |  |
| ( 9 hours), one of which must involve the use of microcomputers in the classroom. |  |  |
| Complete 3 hours for graduate students only (8-0 level) in mathematics or education. |  |  |
| Choose one of the following three options (9 hours): |  |  |
| Statistics option: |  |  |
| STAT 8005 | Statistical Methods I | 3 |
| 8015/STAT Statistical Methods If |  |  |
|  |  |  |
| 3010 |  |  |
| MATH 8010 | Statistical Research for Mathematics | 3 |
|  | Teachers |  |
|  | OR |  |
| MATH | Introduction to Probability and | 3 |
| 8746/MATH | Statistics I |  |
| 4740 |  |  |
| MATH | Introduction to Probability and | 3 |
| 8756/MATH | Statistics II |  |
| 4750 |  |  |
|  | And |  |
| MATH 8010 | Statistical Research for Mathematics Teachers | 3 |
| Mathematics options: |  |  |
| three courses in mathematics with the number 8000 or above, but excluding any whose last digit is " 5 ", except: |  |  |
| MATH | Modern Geometry | 3 |
| 8645/MATH |  |  |
| 3640 |  |  |
| which can be included. |  |  |
| Computer Science option: |  |  |
| three courses in computer science with the number 8000 or above and with at most two of the form 8-5. |  |  |
| MATHMTM Exit Requirements |  |  |
| The mathematics portion: |  |  |
| is three hours in length and covers the courses: |  |  |

## MATHMTM DEGREE REQUIREMENTS

## education courses for

( 9 hours), one of which must involve the use of microcomputers in the classroom.
Complete $\mathbf{3}$ hours for graduate students only (8-0 level) in mathematics or education.
Choose one of the following three options ( 9 hours):
Statistics option:

8746/MATH Statistics I
4740
MATH Introduction to Probability and
8756/MATH Statistics II
4750
MATH 8010 Statistical Research for Mathematics
Teachers
Mathematics options:
three courses in mathematics with the number 8000 or above, but excluding any whose last digit is " 5 ", except: MATH Modern Geometry
8645/MATH
which can be included.

## Conption:

three courses in computer science with the number 8000 or above and with at most two of the form 8-5.

## MATHMTM Exit Requirements

Comprehensive Examination
is three hours in length and covers the courses:

MATH 8060/CSCI
8060
MATH Mathematical Analysis I
8236/MATH
4230
MATH 8036
MATH 8020
MATH 8040

Algorithmic Combinatorics

Applied Modern Algebra
Topics in Geometry and Topology
Topics in Computer Science

The examination consists of two questions from each of the five courses, and the student is required to complete 8 of the 10 questions.

## The education portion:

is two hours in length and covers all the education courses the student has taken for the degree.

Students must pass both portions of the examination in order to pass.

## MATHMTM-Other Program-Related Information:

## Graduate Assistantships

The Mathematics Department annually awards four graduate assistantships for work within the department. There are also several joint UNO/Metropolitan Community College positions in which the teaching assignments are at MCC. All of these positions pay an annual stipend plus a waiver of tuition. For the details of the nature of the work, please contact the department chair.
Total Credit Hours: 36
*** Redirect Link ***
*** Mathematics-Minor ***
Music
M.M.

Department of Music, College of Communication, Fine Arts \& Media

## Vision Statement:

The Master of Music degree at the University of Nebraska at Omaha is divided into three concentrations: Music Education, Music Performance, and Conducting. The Music Performance concentration is a thirty-hour program that emphasizes performance and applied music. Courses dealing with history, theory, and pedagogy (as they relate to performance) are included, and opportunities for internships and performances in local professional organizations such as Opera/Omaha and the Omaha Symphony are enjoyed by students at UNO. The Music Education concentration is available in both a thirty-hour thesis and thirty-six hour non-thesis option. Music Education graduate courses emphasize pedagogy and practical application of music skills and research for
teachers at all levels. The Conducting concentration is a thirty-hour program that emphasizes individualized instruction in conducting and maximizes experiences in front of an ensemble. Courses in music history, literature, and theory supplement the practical experience to help produce well-rounded graduates with considerable knowledge of techniques and literature.

## Program Contact Information:

Dr. Roger Foltz, Graduate Program Chair (GPC)
Strauss Performing Arts (PAC) 226
402-554-2474
rfoltz@unomaha.edu

## Program Website:

http://www.unomaha.edu/music/graduate.php

## Application Deadlines:

- Fall: June 15
- Spring: November 15
- Summer: April 15


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Resume
- Student must have a cumulative GPA of 3.0 or better in all undergraduate courses in music.
- If the student does not have an undergraduate degree in music, the student must take the Department of Music Graduate Diagnostic Exam before enrolling in any graduate courses in order to determine which undergraduate foundation courses may be necessary.
- An audition is required for all applicants wishing to pursue the Performance concentration.


## MUSMM DEGREE REQUIREMENTS

Student must select an area of concentration.
Music Performance Concentration (Non-Thesis Option only)
Required Concentration Courses ( 15 hours):
MUS 8150A Applied Music 3
MUS 8520 Music Bibliography 3
MUS 8460 Music Analysis for Performance 3
Required Music History and Literature ( 3 hours) to be selected from below:
MUS Renaissance Music Literature 3
8546/MUS
4540
MUS Baroque Music Literature 3
8556/MUS
4550
MUS Classical Music Literature 3
8566/MUS
4560
MUS Romantic Music Literature 3
8576/MUS
4570
MUS
Music from 1900-1945
8586/MUS
4580
MUS 8446 Music Since 1945
3
Electives in Music (6 hours):
Electives are approved by the Graduate advisor during the advising process.
Performance Concentration Exit Requirements:
Option A:
MUS 8970 Treatise 3
MUS 8980 Recital 3-

Option B:
MUS 8980 Recital 3-

Music Education Concentration (Thesis: 30 hours; Non-Thesis: 36 hours)
Required Concentration Courses ( 15 hours):
MUS 8630 Research in Music Education 3
MUS 8610 Organization and Administration in 3
MUS 8640 Foundations of Music Education 3
MUS 8660 Pedagogy of Theory 3
MUS 8686 Pedagogy of Multicultural Music 3
Required Music History and Literature (3 hours) to be selected from:
MUS Renaissance Music Literature

8546/MUS

| 4540 |  |  |
| :--- | :--- | :--- |
| MUS | Baroque Music Literature | 3 |
| $8556 /$ MUS |  |  |
| 4550 |  | 3 |
| MUS | Classical Music Literature |  |
| 8566/MUS |  | 3 |
| 4560 |  |  |
| MUS | Romantic Music Literature | 3 |
| 8576/MUS |  |  |
| 4570 |  |  |
| MUS | Music from 1900-1945 | 3 |
| 8586/MUS |  |  |
| 4580 |  |  |
| MUS 8446 | Music Since 1945 |  |

Electives in Music or Education (6 hours):
The electives are approved by the Graduate advisor during the advising process.

## Education Concentration Exit Requirements:

Option A:

MUS 8990 Thesis
All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms, and final approval and submission of the thesis.
Option B:
Additional Music or Music
Education Electives
Comprehensive Examination
Conducting Concentration (Non-Thesis option, 30 hours)

An audition is required before enrollment in Conducting Practicum in this track.
Required Conducting Concentration Courses ( $\mathbf{1 5}$ hours):
MUS 8700 Conducting Practicum
MUS 8520 Music Bibliography
MUS 8460 Music Analysis for Performance
Music History and Literature ( $\mathbf{3}$ hours) to be selected from:
MUS Renaissance Music Literature
8546/MUS
4540
MUS Baroque Music Literature
8556/MUS
4550
MUS
Classical Music Literature
8566/MUS
4560
MUS
Romantic Music Literature

MUS
8586/MUS
4580
MUS 8446

## Electives in Music (6)

The electives are approved by the Graduate advisor during the advising process.
Conducting Concentration Exit Requirement: MUS 8980 Recital 3-

TOTAL CREDIT HOURS:
Thesis Option: 30
Non-Thesis Option: 30-36

## MUSMM-Other Program Related Information:

All students who do not complete a thesis or treatise must take final comprehensive examinations. Students can take comprehensive exams before the semester in which they intend to graduate; however, all required coursework in the program must be completed. The exception is if a student has not completed one required course and is enrolled in that course during the semester in which they are taking their comprehensive exams. Comprehensive exams will be offered three times during the course of the year-Fall, Spring and Summer. Normally the exams are administered on the last Saturday of October or first Saturday in November (Fall Semester), the last Saturday of March or first Saturday in April (Spring Semester), and the last Friday of June or the first Friday of July (Summer Term). *** Redirect Link ***
*** Music-Minor ***

## Political Science

## POLITICAL SCIENCE, M.S.

## Department of Political Science, College of Arts \& Sciences

## Vision Statement

The mission of the Master of Science in Political Science program is to provide the community with the resources to learn about its world. The world can mean many thingshow city government functions, why voters make the choices they do, why wars occur, or how different regions of the world conduct their affairs. Whatever your interest is, indulge your ravenous curiosity to learn about your larger world-with us.

## Program Contact Information:

Dr. Gregory Petrow, Graduate Program Chair (GPC)
Arts \& Sciences Hall (ASH) 275E
402-554-2624

## gpetrow@unomaha.edu

## Program Website:

http://www.unomaha.edu/psci/grad.php

## Application Deadlines:

- Fall: July 15
- Spring: November 15
- Summer: April 15


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- 2 Letters of Recommendation


## PSCIMS DEGREE REQUIREMENTS

## PSCIMS Required Courses (15 hours):

| PSCI 8000 | Seminar in the Research Methods of <br> Political Science | 3 |
| :--- | :--- | ---: |
| PSCI 8040 | Seminar in American Government <br> and Politics | 3 |
| PSCI 8200 | Seminar in Foreign and Security <br> Policies | 3 |
| PSCI 8250 | Seminar in Global Politics <br> PSCI 8300 | Seminar in Political Theory |
| Non-Thesis Capstone Option: |  |  |
| choose one (1) from the list below: |  |  |
| PSCI 8910 | Political Internship |  |
| PSCI 8980 | Research Tutorial | 3 |

PSCI 8980 Research Tutorial

## Non-Thesis students:

after completing the five core seminars and the non-thesis capstone option, there are 18 units of electives remaining to be completed.

## Thesis students:

after completing the five core seminars and the six units of Master's Thesis credit, there are 9 units of electives remaining to be completed.

## Electives:

Please see our course listings for graduate, 8000-level departmental electives. Remember that we can only count six units of courses that are numbered $8-5$, and also that we can count up to 18 units of graduate courses outside of political science.

## PSCIMS Exit Requirements:

## Thesis Option

PSCI 8990 Thesis 3-

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms, and final approval and submission of the thesis.

## Non-Thesis Option

Comprehensive Examination

## TOTAL CREDIT HOURS:

Thesis Option: 30
Non-Thesis Option: 36

## PSCIMS-Other Program-Related Information:

## Alternative Delivery

- The University of Nebraska at Omaha Department of Political Science offers a program to earn a Master's Degree for which all courses are offered online. There are several advantages to UNO's Online Master of Science in Political Science:
- High-quality curriculum from a distinguished university. UNO is one of 88 institutions of higher education nationally classified as a doctoral/research university, according to the Carnegie Foundation for the Advancement of Teaching-out of the 4000 academic institutions it categorizes. In addition, UNO received a first-tier regional best ranking in the U.S. News \& World Report's 2010 edition of America's Best Colleges. UNO ranked 18th among public masters' institutions in the Midwest region.
- Low tuition from a convenient, accessible location-your computer. Courses are taught entirely online. It is very rare for our courses to have specific times in which you are required to be online. In other words, you pick the times and locations that are most convenient for you. For the 2011-12 academic year, tuition for the online MSPSCI program is $\$ 622.50$ per credit for non-
residents and $\$ 236.50$ per credit for Nebraska residents.
- The University of Nebraska at Omaha Department of Political Science offers a Master's Degree in Political Science (MS PSCI). This degree serves many goals. Some students prefer to use it as a springboard to apply for a Ph.D. program in political science; some students are social studies teachers who wish to learn more about their subject matter. Others are military personnel who take classes in international security, foreign policy, or intelligence. Still others seek a deeper background in government before entering public service. Our program has been in place since 1969; we currently have over 40 active students; and we have graduated over 100 students in the history of the program.
- The UNO PSCI program affords its students an environment that serves as an incubator for acquiring the skills necessary for students' desired careers, and for developing a self-understanding that will enable students to succeed both professionally and personally. Students are assured of a high-quality degree program that not only meets but exceeds national standards of education in political science.
- Our Flexibility: our program offers the maximum possible flexibility to tailor an area of specialization. This flexibility encourages students to create a program of study that incorporates interests in other disciplines, such as communications, criminal justice, economics, geography, history, psychology, public administration, social work, sociology, teacher education, and urban studies. We accept up to 18 hours toward the MS in Political Science from outside the department. In addition, we accept up to 12 hours of transfer credit from other MS programs.
- Outstanding Teaching: our faculty regularly wins campus and system-wide teaching awards, making us one of the most recognized departments on campus. We have a proven track record of excellence in undergraduate and graduate instruction, and are nationally known for our innovative research on some of the discipline's most important questions.
- Dr. Jody Neathery-Castro: 2011 College of Arts \& Sciences Distinguished Service Award; 2007 College of Arts \& Sciences Excellence in Teaching Award; 2007 Chancellor's Excellence in Teaching Award
- Dr. Randall Adkins: 2010 Chancellor's Excellence in Teaching Award; 2007 College of Arts \& Sciences Excellence in Teaching Award
- Dr. Steve Bullock: 2008 College of Arts \& Sciences Excellence in Teaching Award
- Dr. Meredith Bacon: 2006 College of Arts \& Sciences Excellence in Teaching Award
- Dr. Jonathan Benjamin-Alvarado: 2003 College of Arts \& Sciences Excellence in Teaching Award
- Dr. James B. Johnson: 2001 College of Arts \& Sciences Excellence in Teaching Award
- Dr. Loree Bykerk: 1997 College of Arts \& Sciences Excellence in Teaching Award
- Our faculty utilize active and service-learning teaching strategies; multiple assessment tools; participate in extended education on improving teaching and learning; and publish research on pedagogy.
- For many years we have conducted exit interviews with our graduates. They show very high levels of satisfaction with the quality of instruction, the advising process, the amount of attention paid to students, and the ease with which the students interact with university personnel and procedures.
*** Redirect Link ***
*** Political-Science-Minor ***


## Psychology

## PSYCHOLOGY, M.A.

Department of Psychology, College of Arts and Sciences

## Vision Statement

The Master of Arts in Psychology is designed to give students a broad background in the field of psychology plus a sufficient degree of specialization to prepare them for either careers or further graduate training.

## Program Contact Information:

Dr. Joseph Brown, Graduate Program Chair (GPC)
Arts \& Sciences Hall (ASH) 347J
402-554-2313
josephbrown@unomaha.edu

## Program Website:

http://www.unomaha.edu/psych/

## Application Deadlines:

- Fall: January 5
- Spring:
- Summer:


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 for Written TOEFL
- 173 for computer-based TOEFL
- 61 for internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 2.7 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Baccalaureate degree with a minimum of 3.0 GPA.
- A minimum of 15 undergraduate semester hours or the equivalent of psychology or related courses including: basic statistics and an upper level laboratory course, independent research, or equivalent, emphasizing the experimental method, data collection, statistical analysis, and report writing are required.
- Graduate Record Examination (GRE) is required
- Three (3) Letters of Recommendation are required
- From professors and individuals who can speak to applicant's potential for success in a graduate program.
- A Statement of Purpose is required
- A Writing Sample is required
- prefer APA style
- A Resume is required


## MA-PSYC DEGREE REQUIREMENTS

Student must select an area of concentration.
See Psychology, M.A. Concentrations (p. 135)
MA-PSYC Required Course (0 hours):
PSYC 8000 The Profession of Psychology
Total is determined by which area of concentration is completed.

## Other requirements needed for a student to complete the program

Obtaining a score of at least 600 on the Advanced Psychology Test of the GRE. (NOTE: not required for the Applied Behavior Analysis and Neuroscience \& Behavior areas of concentration).

Total Credit Hours: 30-37
PSYCHOLOGY, M.A. CONCENTRATIONS
COGNITIVE CONCENTRATION: (THESIS OPTION 30 HOURS)

| Required Concentration Proseminar Courses (18 <br> hours) |  |  |
| :--- | :--- | :--- |
| PSYC 9010 | Proseminar: Statistical Methods I | 3 |
| PSYC 9020 | Proseminar: Statistical Methods II | 3 |
| PSYC 9070 | Proseminar: Cognitive Psychology | 3 |
| PSYC 9210 | Proseminar: Perception | 3 |
| PSYC 9230 | Proseminar: Behavioral | 3 |
|  | Neuroscience |  |
| PSYC 9560 | Proseminar: Developmental | 3 |
|  | Psychology |  |

Select two (2) Advanced Cognitive Courses (6 hours)
PSYC Psycholinguistics 3

8526/PSYC
4520
PSYC 9040 Proseminar: Learning 3
PSYC 9120 Multivariate Statistical Analysis 3
PSYC 9530 Cognitive Development 3
PSYC 9520 Language Development 3
PSYC 9910 Topical Seminar in Psychology 1 -

PSYC 9910: (Cognitive topic)
Cognitive Concentration Exit Requirements Comprehensive Examination

PSYC 8990 Thesis
1 -
6

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval of a thesis and final submission of the thesis.

## INDUSTRIAL ORGANIZATIONAL CONCENTRATION (THESIS OPTION 36 HOURS)

| Required Industrial Organizational Concentration <br> Proseminar <br> Courses (9 hours) |  |  |
| :--- | :--- | :--- |
| PSYC 9010 | Proseminar: Statistical Methods I | 3 |
| PSYC 9020 | Proseminar: Statistical Methods II | 3 |
| PSYC 9440 | Proseminar: Social Psychology | 3 |
| Select one (1) Proseminar required course (3 hours) |  |  |
| PSYC 9040 | Proseminar: Learning | 3 |
| PSYC 9070 | Proseminar: Cognitive Psychology | 3 |
| PSYC 9210 | Proseminar: Perception | 3 |
| PSYC 9230 | Proseminar: Behavioral | 3 |
|  | Neuroscience |  |
| PSYC 9240 | Proseminar: Evolutionary | 3 |


| Psychology |  |  |
| :---: | :---: | :---: |
| Select one additional Proseminar course (3 hours) |  |  |
| (or may be waived and substituted by an elective) |  |  |
| PSYC 9040 | Proseminar: Learning | 3 |
| PSYC 9070 | Proseminar: Cognitive Psychology | 3 |
| PSYC 9210 | Proseminar: Perception | 3 |
| PSYC 9230 | Proseminar: Behavioral | 3 |
|  | Neuroscience |  |
| PSYC 9240 | Proseminar: Evolutionary | 3 |
|  | Psychology |  |
| PSYC 9430 | Proseminar: Personality | 3 |
| PSYC 9560 | Proseminar: Developmental | 3 |
|  | Psychology |  |
| Select one (1) Industrial Organizational Core Course (3 hours) |  |  |
| PSYC 9610 | Industrial Motivation \& Morale | 3 |
| PSYC 9620 | Industrial Training and | 3 |
|  | Organizational Development |  |
| PSYC 9630 | Leadership Theories and Research | 3 |
| PSYC 9640 | Problem Solving \& Decision Making | 3 |
| Additional Required Industrial Organizational Courses (12 hours) |  |  |
| PSYC 9090 | Theory of Measurement and Design | 3 |
| PSYC 9650 | Research Methods in Psychology |  |
| PSYC 9660 | Criterion Development and | 3 |
|  | Performance Appraisal |  |
| PSYC 9670 | Personnel Selection | 3 |
| Industrial Organizational Concentration Exit Requirements |  |  |
|  | Comprehensive Examination |  |
| PSYC 8990 | Thesis |  |
| All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval of a thesis and final submission of the thesis. |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| NEUROSCIENCE AND BEHAVIOR CONCENTRATION (THESIS OPTION 30 HOURS) |  |  |
| Required Neuroscience and Behavior Courses (6 hours) |  |  |
| PSYC 9010 | Proseminar: Statistical Methods I | 3 |
| PSYC 9020 | Proseminar: Statistical Methods II | 3 |
| Select one (1) course from Group I Proseminar: (3 hours) |  |  |
| PSYC 9210 | Proseminar: Perception | 3 |
| PSYC 9230 | Proseminar: Behavioral | 3 |
|  | Neuroscience |  |
| PSYC 9240 | Proseminar: Evolutionary | 3 |
|  | Psychology |  |
| PSYC 9040 | Proseminar: Learning | 3 |

Select one additional Proseminar course (3 hours)

Select one (1) Industrial Organizational Core Course (3 urs)
PSYC 9610 Industrial Motivation \& Morale 3
PSYC 9620 Industrial Training and 3
Organizational Development
PSYC 9630 Leadership Theories and Research 3
Problem Solving \& Decision Making

## Industrial Organizational Concentration Exit Requirements

Comprehensive Examination
PSYC 8990 Thesis 1 -

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval of a thesis and final submission of the thesis.

## CONCENTRATION (THESIS OPTION 30 OURS

Required Neuroscience and Behavior Courses (6 hours)
PSYC 9010 Proseminar: Statistical Methods I 3
PSYC 9020 Proseminar: Statistical Methods II 3
Select one (1) course from Group I Proseminar: (3 hours)
PSYC 9210
Proseminar: Perception
PSYC 9230
Neuroscience

Psychology
Proseminar: Learning

PSYC 9070 Proseminar: Cognitive Psychology 3
Select one (1) course from Group II Proseminar: (3 hours)
PSYC 9430 Proseminar: Personality 3
PSYC 9440 Proseminar: Social Psychology 3
PSYC 9560 Proseminar: Developmental 3
Psychology
Select one (1) additional Proseminar: (3 hours)
PSYC 9040 Proseminar: Learning 3
PSYC 9070 Proseminar: Cognitive Psychology 3
PSYC 9210 Proseminar: Perception 3
PSYC 9230 Proseminar: Behavioral 3
Neuroscience
PSYC 9240 Proseminar: Evolutionary 3
Psychology
PSYC 9430 Proseminar: Personality 3
PSYC 9440 Proseminar: Social Psychology 3
PSYC 9560 Proseminar: Developmental 3 Psychology
Neuroscience and Behavior Field-related Electives (6 hours)
to be determined in consultation with your graduate advisor; may be PSYC, BIOL, or NEUR 8-or 9-level courses except:
PSYC 8990 Thesis 1 -

Or
PSYC 9960 Research Other Than Thesis 1 -
approved GBCA (UNMC) allowed.
Neuroscience and Behavior Electives (3 hours)
to be determined in consultation with your graduate advisor; may be PSYC, BIOL or NEUR 8---- or 9---- level courses except:
PSYC 8990 Thesis 1 -
approved GBCA (UNMC) allowed.
$\begin{array}{lll}\begin{array}{l}\text { Neuroscience and Behavior Concentration Exit } \\ \text { Requirements }\end{array} & \\ \text { PSYC } 8990 & \text { Comprehensive Examination } & \\ & \text { Thesis } & 1 \text { - }\end{array}$

All candidates should carefully review the Graduate
College requirements for forming the Supervisory
Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval of a thesis and final submission of the thesis.

## SOCIAL/PERSONALITY CONCENTRATION (THESIS OPTION 30 HOURS)

## Required Social/Personality Concentration Proseminar Courses ( 12 hours)

PSYC 9440 Proseminar: Social Psychology 3
PSYC 9430 Proseminar: Personality 3
PSYC 9010 Proseminar: Statistical Methods I 3
PSYC 9020 Proseminar: Statistical Methods II 3
Additional Required Social/Personality Concentration
Course (3 hours)
PSYC $9550 \quad$ Psychosocial Development
PSYC 9550 Psychosocial Development
Social/Personality Concentration Electives
( 9 hours) to be determined in consultation with your graduate advisor any PSYC 8---- or 9---- level course.

## Social/Personality Exit Requirements Comprehensive Examination <br> PSYC 8990 Thesis

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval of a thesis and final submission of the thesis.

## DEVELOPMENTAL CONCENTRATION (THESIS OPTION 31 HOURS)

Plan A is recommended for students who plan to pursue a PhD and/or who wish to complete an independent research project (the thesis).
This plan requires completion of a minimum of 31 credit hours, as listed below:
PSYC 9560 Proseminar: Developmental 3
Psychology
PSYC 9010 Proseminar: Statistical Methods I 3
PSYC 9020 Proseminar: Statistical Methods II 3
PSYC 9650 Research Methods in Psychology 3
PSYC 9960 Research Other Than Thesis 1 -

PSYC 9960: (1-6 credit hours)
Select two (2) additional Developmental Concentration Courses ( 6 hours)
PSYC 9070 Proseminar: Cognitive Psychology 3
PSYC 9230 Proseminar: Behavioral
PSYC 9430 Proseminar: Personality 3
PSYC 9440 Proseminar: Social Psychology 3
Select two (2) Advanced Developmental Concentration Seminars (6 hours)
PSYC 9500 Socioemotional Development 3
PSYC 9510 Research Methods in Developmental 3 Psychology

| PSYC 9520 | Language Development | 3 |
| :--- | :--- | ---: |
| PSYC 9530 | Cognitive Development | 3 |
| PSYC 9540 | Memory and Mechanism of | 3 |
|  | Development | 3 |
| PSYC 9550 | Psychosocial Development | $3-$ |
| PSYC 9590 | Seminar in Developmental | 9 |
|  | Psychology |  |
| Developmental Concentration Exit Requirements |  |  |
| PSYC 8990 | Comprehensive Examination | $1-$ |
|  | Thesis | 6 |

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval of a thesis and final submission of the thesis.

## PLAN B (NON-THESIS OPTION 37 HOURS):

Plan B is recommended for students who plan to work in an applied setting involving children and/or families and who do not plan to pursue a PhD . This plan requires completion of a minimum of 37 credit hours. In addition to required course work, students choose 3 elective courses (within or outside the Department of Psychology).
Instead of a thesis, students complete two applied practica (6 credit hours).
PSYC 9560 Proseminar: Developmental 3 Psychology
PSYC 9650 Research Methods in Psychology 3
PSYC 9960 Research Other Than Thesis 1 -

PSYC 9960: (1-6 credit hours)
Select one (1) Statistics Course: (3 hours)
PSYC 9010 Proseminar: Statistical Methods I 3
PSYC 9020 Proseminar: Statistical Methods II 3
Select two (2) additional Developmental Concentration Proseminars (6 hours)
PSYC 9070 Proseminar: Cognitive Psychology 3
PSYC 9230 Proseminar: Behavioral 3
Neuroscience
PSYC 9430 Proseminar: Personality 3
PSYC 9440 Proseminar: Social Psychology 3
Select two (2) Advanced Developmental Concentration Seminars (6 hours)
PSYC 9500 Socioemotional Development 3
PSYC 9510 Research Methods in Developmental 3 Psychology
PSYC 9520 Language Development 3
PSYC 9530 Cognitive Development 3
PSYC 9540 Memory and Mechanism of 3 Development
PSYC 9550 Psychosocial Development 3
PSYC 9590 Seminar in Developmental 3-

> Psychology

Select three (3) Developmental Concentration Electives (9 hours)
PSYC 8250 Family Analysis and Treatment 3
PSYC Psychological and Educational 3
8316/PSYC Testing
4310
PSYC 8590 Psychology of Exceptional Children 3
PSYC 9090 Theory of Measurement and Design 3
PSYC 9320 Seminar in Program Evaluation 3
PSYC 9570 Applied Behavior Analysis
Additional courses outside the department of Psychology
(e.g., SOWK, SOC, SPED, GERO, CJUS, COUN, and PA)
Developmental Concentration Exit requirements:

PSYC $8980 \quad$| Comprehensive Examination |
| :--- |
| Practicum in Developmental |
| Psychology |

PSYC 8980: (6 credit hours)
APPLIED BEHAVIOR ANALYSIS
CONCENTRATION (NON-THESIS OPTION 36
HOURS)

## APPLIED BEHAVIOR ANALYSIS

 CONCENTRATION (NON-THESIS OPTION 36 HOURS)| Required Applied Behavior Analysis Concentration Proseminar Courses ( $\mathbf{1 2}$ hours) |  |
| :---: | :---: |
| PSYC 9040 | Proseminar: Learning |
| PSYC 9230 | Proseminar: Behavioral Neuroscience |
| PSYC 9560 | Proseminar: Developmental Psychology |
| PSYC 9010 | Proseminar: Statistical Methods I OR |
| PSYC 9020 | Proseminar: Statistical Methods II |

Applied Behavior Analysis Concentration Additional
Courses (24 hours)
PSYC $8520 \quad$ Foundations of Assessment
PSYC 8550 Psychotherapeutic Interventions 3
PSYC Behavior Analysis and Interventions 3
8576/PSYC
4570
$\begin{array}{ll}\text { PSYC } 8800 & \text { Ethics and Law for Psychologists } \\ & \text { OR }\end{array}$
COUN 8040 Professional and Ethical Issues for 3
Professional Counselors
PSYC 9570 Applied Behavior Analysis 3
PSYC 9100 Small n Research Designs 3
PSYC 9574 Laboratory in Applied Behavior 3-
Analysis
PSYC 9574: (6 credits, 750 hours)
Applied Behavior Analysis Concentration Exit Requirements:

Comprehensive Examination

PSYCHOLOGY, PH.D.
Department of Psychology, College of Arts \& Sciences
Our Ph.D. programs prepare students for applied, research, or teaching positions in the areas of Developmental Psychology, Industrial/Organizational Psychology and Neuroscience and Behavior.

## Program Contact Information:

Dr. Joseph Brown, Graduate Program Chair (GPC)
Arts \& Sciences Hall (ASH) 347J
402-554-2313
josephbrown@unomaha.edu

## Program Website:

http://www.unomaha.edu/psych/

## Application Deadlines:

- Fall: January 5
- Spring: NA
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Graduate Record Examination (GRE) is required.
- Three (3) Letters of Recommendation
- From professors and individuals who can speak to the applicant's potential for success in a graduate program.
- Statement of Purpose
- Writing Sample
- Prefer APA style
- Resume


## PSYCPHD DEGREE REQUIREMENTS

## PSYCPHD Concentrations:

Student must select an area of concentration.
See Psychology, Ph.D. Concentrations (p. 139)

## PSYCPHD-Other Program-Related Information:

Students have eight (8) years to complete the Ph.D. in Psychology from the time of filing a program of study.
Total Credit Hours: 90
PSYCHOLOGY, PH.D. CONCENTRATIONS

## INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY CONCENTRATION

Noted courses are required as part of our MA concentration in Industrial/Organizational Psychology. These courses or their equivalent will be required for students who have earned their MA from another institution.

## General Psychology Courses

Included in MA Concentration in Industrial/Organization Psychology

PSYC 9440 Proseminar: Social Psychology
(required)

## One of:

| PSYC 9040 | Proseminar: Learning | 3 |
| :--- | :--- | :--- |
| PSYC 9230 | Proseminar: Behavioral | 3 |
|  | Neuroscience |  |
| PSYC 9070 | Proseminar: Cognitive Psychology | 3 |

## Included in MA Concentration in Industrial/Organization Psychology PSYC 9210 Proseminar: Perception

## Third prosem:

PSYC 9560 Proseminar: Developmental Psychology
PSYC 9430 Proseminar: Personality
PSYC 9040 Proseminar: Learning
PSYC 9230 Proseminar: Behavioral Neuroscience

Included in MA Concentration in Industrial/Organization Psychology
PSYC 9070 Proseminar: Cognitive Psychology 3
PSYC 8000 The Profession of Psychology
PSYC 9070: (May be waived and replaced)
PSYC 8000: (required)
Statistics and Methods CoursesPSYC 9320 Seminar in Program Evaluation3
Included in MA Concentration in Industrial/Organization Psychology
(Required)
PSYC 9010 Proseminar: Statistical Methods I ..... 3
PSYC 9020 Proseminar: Statistical Methods II ..... 3
PSYC 9090 Theory of Measurement and Design ..... 3
PSYC 9650 Research Methods in Psychology ..... 3
PSYC 9120 Multivariate Statistical Analysis ..... 3
Required Industrial/Organizational Courses
Industrial/Organization Psycholog
PSYC 9660 Criterion Development and ..... 3 Performance Appraisal
PSYC 9670 Personnel Selection ..... 3
Core Industrial/Organizational Courses
(require all $4 ; 1$ course taken as part of the MA*) PSYC 9620 Industrial Training and ..... 3
Organizational Development
PSYC 9630 Leadership Theories and Research ..... 3
PSYC 9640 Problem Solving \& Decision Making ..... 3
PSYC 9610 Industrial Motivation \& Morale ..... 3
Topical Seminar
PSYC 9030 Seminar: Topics in Industrial ..... 3 -
Organizational Psychology ..... 9
PSYC 9030: (topics will change); 2 required
Practicum
PSYC 9950 Practicum for Doctoral Students 1 -
PSYC 9950: (6 hours required for Ph.D); cannot be takenuntil AFTER completion of MA thesis
Research Other than Thesis
PSYC 9960 Research Other Than Thesis ..... 1 -12
(6 hours required)
Thesis
PSYC 8990 Thesis ..... 1 -6
(6 hours required)*
Dissertation
PSYC 9990 Psychology Dissertation ..... 1 -20
(12-24 hours required)

## Electives

Any course that is not required can serve as an elective as approved by the chair of the Ph.D. committee. It is
recommended that one course be taken outside the psychology department.

## Exit Requirements <br> PSYC 9990 Psychology Dissertation 1 - <br> Comprehensive Examination <br> PSYC 9990: (12-24 hours) <br> DEVELOPMENTAL PSYCHOLOGY CONCENTRATION

| Required Courses (15 hours) |  |  |
| :--- | :--- | ---: |
| PSYC 9560 | Proseminar: Developmental | 3 |
|  | Psychology |  |
| PSYC 9550 | Psychosocial Development | 3 |
| PSYC 9500 | Socioemotional Development | 3 |
| PSYC 9530 | Cognitive Development | 3 |
| PSYC 8900 | Problems in Psychology | $1-$ |

PSYC 8900:
Readings
Presentation
Review Paper
At least 12 hours of additional coursework in Psychology
(must include at least one additional Proseminar course):
PSYC 9070 Proseminar: Cognitive Psychology 3
PSYC 9230 Proseminar: Behavioral 3
Neuroscience
PSYC 9430 Proseminar: Personality 3
PSYC 9440 Proseminar: Social Psychology 3
PSYC 9520 Language Development 3
PSYC 9540 Memory and Mechanism of 3
Development
PSYC 9590 Seminar in Developmental 3-
Psychology 9
PSYC 9040 Proseminar: Learning 3
PSYC Abnormal Psychology 3
8446/PSYC
4440
PSYC Psycholinguistics
8526/PSYC
4520
PSYC 9210 Proseminar: Perception 3
PSYC 9290 Seminar in Developmental 3-
Psychobiology 9
PSYC Seminar in Aging and Human 3
9460/GERO Behavior
9460
PSYC 9600 Developmental Psychopathology:
Research and Practice
PSYC 9040: (in conjunction with MMI)

## At least $\mathbf{1 2}$ hours of coursework in Methods, Design and Evaluation

REQUIRED:
PSYC 9650 Research Methods in Psychology 3
Eligible courses:
$\begin{array}{ll}\text { PSYC 9510 } & \begin{array}{l}\text { Research Methods in Developmental } \\ \text { Psychology }\end{array}\end{array}$
PSYC Psychological and Educational 3
8316/PSYC Testing
4310
PSYC 8520 Foundations of Assessment 3
PSYC 9320 Seminar in Program Evaluation 3
PSYC 9090 Theory of Measurement and Design 3
SOC Advanced Qualitative Methods 3
8416/SOC
4410
SOC 8416: (through department of Sociology/Anthropology)
At least $\mathbf{1 2}$ hours of coursework in Statistical Analysis
Required:
PSYC 9010 Proseminar: Statistical Methods I 3
PSYC 9020 Proseminar: Statistical Methods II 3
Eligible courses:
PSYC 8140 Nonparametric Statistics 3
PSYC 9120 Multivariate Statistical Analysis 3
GERO Issues in Aging 3
8356/GERO
4350
PSYC 9910 Topical Seminar in Psychology 1 -

GERO 8356: (through department of Gerontology)
At least 6 hours of coursework in Human Diversity
PSYC 8590 Psychology of Exceptional Children 3 Course in Cross-Cultural 3 Development
At least 12 hours of Elective Coursework
Students will also find eligible courses in (among other disciplines):

> Child, Youth, and Family Studies
> Sociology/Anthropology
> Gerontology
> Latino/Latin American Studies

At least 21 hours of coursework in Empirical Research
PSYC 9960 Research Other Than Thesis 1 -

PSYC 9960: (at least 3 hours)
Included in MA Concentration in
Industrial/Organization Psychology
PSYC $8990 \quad$ Thesis Industrial/Organization Psychology PSYC 8990 Thesis

PSYC 8990: (6 hours; required for Master's degree)

## Exit Requirement:

PSYC 9990 Psychology Dissertation 1 -
Comprehensive Examination
PSYC 9990: (12-20 hours)
Every student must complete a two-party qualifying examination consisting of:
Psychology readings including a written and oral examination across domains

Grant Proposal OR
Course Development (child development, adolescent development or lifespan development)
Additionally, each student is expected to demonstrate proficiency with at least one research tool.

## NEUROSCIENCE AND BEHAVIOR CONCENTRATION

| Required Course (15 hours) |  |  |
| :--- | :--- | ---: |
| PSYC 9290 | Seminar in Developmental | $3-$ |
|  | Psychobiology | 9 |
|  | 12 hours in graduate-level courses in | 12 |
|  | biological and behavioral sciences |  |

## Electives (15 hours)

To be determined by the student's supervisory committee

## Exit Requirement

PSYC 9990 Psychology Dissertation 1 -
Comprehensive Examination
PSYC 9990: (12-20 hours)
*** Redirect Link ***
*** Human-Resources-and-Training-Certificate ***

## INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY, M.S.

Department of Psychology, College of Arts \& Sciences Vision Statement

The MS in Industrial/Organizational Psychology is designed to prepare students for work in applied settings as well as for continued education. Students are trained using the scientist-practitioner model advocated by Society for Industrial Organizational Psychology (SIOP).

## Program Contact Information:

Dr. Joseph Brown, Graduate Program Chair (GPC)
Arts \& Sciences Hall (ASH) 347J
402-554-2313
josephbrown@unomaha.edu

## Program Website:

http://www.unomaha.edu/psych/graduate.php

## Application Deadlines:

- Fall: January 5
- Spring: NA
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- A minimum of 15 undergraduate semester hours (or the equivalent) of psychology courses including: basic statistics and an upper level laboratory course, independent research, or equivalent, emphasizing the experimental method, data collection, statistical analysis, and report writing are required.
- Graduate Record Examination (GRE) required.
- Three (3) Letters of Recommendation
- Statement of Purpose
- The statement of purpose should include: your purpose in applying for graduate study, your particular area of specialization within the major field, your plans for future occupation or profession, and any additional information that may aid the selection committee in evaluating your preparation and your aptitude for graduate study. You should specifically address your goals and objectives in pursuing graduate study.
- Writing Sample
- Resume


## MS-IPSY DEGREE REQUIREMENTS

| MS-IPSY Required Courses (33 hours): |  |  |
| :--- | :--- | :---: |
| PSYC 8000 | The Profession of Psychology | 1 |
| PSYC 9090 | Theory of Measurement and Design | 3 |
| PSYC 9440 | Proseminar: Social Psychology | 3 |
| PSYC 9010 | Proseminar: Statistical Methods I | 3 |
| PSYC 9660 | Criterion Development and | 3 |
|  | Performance Appraisal |  |
| PSYC 9020 | Proseminar: Statistical Methods II | 3 |
| PSYC 9670 | Personnel Selection | 1 |
| PSYC 8950 | Practicum for Master's Students | 6 |
|  |  |  |
| Select 2 |  | 3 |
| PSYC 9610 | Industrial Motivation \& Morale | 3 |
| PSYC 9620 | Industrial Training and |  |
| PSYC 9630 | Organizational Development | Leadership Theories and Research |
| PSYC 9640 | Problem Solving \& Decision Making | 3 |


| Select 1 |  |  |
| :--- | :--- | :--- |
| PSYC 9070 | Proseminar: Cognitive Psychology | 3 |
| PSYC 9040 | Proseminar: Learning | 3 |
| PSYC 9230 | Proseminar: Behavioral | 3 |
|  | Neuroscience |  |

Select 1
PSYC 9560 Proseminar: Developmental 3 Psychology
PSYC 9430 Proseminar: Personality 3
PSYC 9070 Proseminar: Cognitive Psychology 3
PSYC 9040 Proseminar: Learning 3
PSYC 9230 Proseminar: Behavioral 3
Neuroscience
MS-IPSY Electives (3 hours):
Selected from any department as approved by your advisor.

## MS-IPSY Exit Requirements:

Comprehensive Examination
Total Credit Hours: 36
SCHOOL PSYCHOLOGY, M.S.

## Department of Psychology, College of Arts and Sciences

## Vision Statement

The UNO School Psychology Program's mission is to graduate students who have met high levels of academic excellence relevant to the knowledge and skills in the profession of school psychology and are engaged in and committed to the community. The program is designed to prepare graduates to function as scientist-practitioners in service to children and their families, schools, and communities. The program emphasizes an indirect service
delivery approach that is oriented in data-based problemsolving and is responsive to cultural and ecological contexts. Although indirect approaches are emphasized (e.g., consultation, assessment, prevention, and early intervention), graduates are prepared to apply direct psychological services (e.g., individual-, group-, and systems-level interventions) when conditions warrant.

## Program Contact Information:

Dr. Joseph Brown, Graduate Program Chair (GPC)
Arts \& Sciences Hall (ASH) 347J
402-554-2313
josephbrown@unomaha.edu

## Program Website:

http://www.unomaha.edu/schoolpsych/

## Application Deadlines:

- Fall: December 15
- Spring: NA
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- A minimum of 15 undergraduate semester hours or the equivalent of psychology courses including: basic statistics and an upper level laboratory course, independent research, or equivalent, emphasizing the experimental method, data collection, statistical analysis, and report writing, are required.
- Graduate Record Examination (GRE)
- Three (3) Letters of Recommendation
- From professors and individuals who can speak to applicant's potential for success in a graduate program.
- Statement of Purpose
- Writing Sample
- APA style preferred
- Resume


## MS-SPSY DEGREE REQUIREMENTS

| MS-SPSY Required Course (36 hours): |  | 1 |
| :---: | :---: | :---: |
| PSYC 8000 | The Profession of Psychology |  |
| PSYC 9230 | Proseminar: Behavioral | 3 |
|  | Neuroscience |  |
| PSYC 9440 | Proseminar: Social Psychology | 3 |
| PSYC 9560 | Proseminar: Developmental | 3 |
|  | Psychology |  |
| PSYC 9010 | Proseminar: Statistical Methods I | 3 |
|  | OR |  |
| PSYC 9020 | Proseminar: Statistical Methods II | 3 |
| PSYC 8500 | Professional, Legal, and Ethical | 3 |
|  | Foundations of School Psychology |  |
| PSYC 8520 | Foundations of Assessment | 3 |
| PSYC 8530 | Early Childhood Assessment | 3 |
| PSYC 8540 | School Age Assessment | 3 |
| PSYC | Behavior Analysis and Interventions | 3 |
| 8576/PSYC |  |  |
| 4570 |  |  |
|  | OR |  |
| PSYC 8550 | Psychotherapeutic Interventions | 3 |
| PSYC 8590 | Psychology of Exceptional Children | 3 |
| PSYC 8970 | Master's Level Practicum in School | $1-$ |
|  | Psychology | 6 |
| TED 8210 | Human Relations for Bias Free | 3 |
|  | Education |  |

PSYC 8550: the other course is taken at the Ed.S. level

## MS-SPSY Exit Requirements:

 PortfolioStudents are required to submit a Comprehensive Portfolio (CP) near the end of their Master's work. A portfolio is a systematic and purposeful collection of work that documents a student's professional competencies within the program's training objectives. The CP meets the graduate school's Master's-level comprehensive examination requirement. The portfolio is intended to represent the student's progress towards meeting program outcomes and his or her ability to effect positive change for children, schools, and families. Thus, it is a formative and summative evaluation of student progress through the program's training objectives.
Total Credit Hours: 36
SCHOOL PSYCHOLOGY, ED.S.

## Department of Psychology, College of Arts \& Sciences Vision Statement

The UNO School Psychology Program's mission is to graduate students who have met high levels of academic excellence relevant to the knowledge and skills in the profession of school psychology and that are engaged in and committed to the community. The program is designed to prepare graduates to function as scientist-practitioners in service to children and their families, schools, and communities. The program emphasizes an indirect service delivery approach that is oriented in data-based problemsolving and is responsive to cultural and ecological contexts. Although indirect approaches are emphasized (e.g., consultation, assessment, prevention, and early intervention), graduates are prepared to apply direct psychological services (e.g., individual-, group-, and systems-level interventions) when conditions warrant.

## Program Contact Information:

Dr. Joseph Brown, Graduate Program Chair (GPC)
Arts \& Sciences Hall (ASH) 347J
402-554-2313
josephbrown@unomaha.edu
Program Website:
http://www.unomaha.edu/schoolpsych/

## Application Deadlines:

- Fall: December 15
- Spring: NA
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Must have earned a master's degree in School Psychology prior to admittance into the Ed.S. program.
EDS-SPSY DEGREE REQUIREMENTS
EDS-SPSY Required Courses ( 30 hours):
PSYC 8250 Family Analysis and Treatment
PSYC 9320 Seminar in Program Evaluation 3
PSYC 9780 Advanced Consultation in 3
Psychology and Education
PSYC 9940 School Psychology Applied 1 Research Project 7
PSYC 9970 Ed.S. Level Practicum in School 1 Psychology 6
PSYC 9980 Internship in School Psychology 3

One of the following:
PSYC Behavior Analysis and Interventions
8576/PSYC
4570
OR
PSYC 8550 Psychotherapeutic Interventions
(the other course is taken at the Master's level)

## EDS-SPSY Electives (6 hours):

Graduate course in Education
Graduate course in Counseling
Elective courses must be approved by School Psychology Program Committee. Students must submit a written justification to the Program Director at least one month before the start of the course stating how the proposed elective course fits into their Plan of Study. The course catalog description must be included in the justification.

## EDS-SPSY Exit Requirements:

Must successfully complete the School Psychology PRAXIS Examination
36 hours is earned for the Ed.S. in School Psychology 36 hours is earned in a Master's degree in School Psychology
Total Credit Hours: 72
Public Administration
M.P.A.

## School of Public Administration, College of Public Affairs \& Community Service

Vision Statement
The mission of the Master of Public Administration program is to strengthen the public service in a democratic and diverse society by educating students to manage and lead public and nonprofit institutions effectively, ethically and democratically.

## Program Contact Information:

Dr. Carol Ebdon, Graduate Program Chair (GPC) College of Public Affairs \& Community Service (CB) 111B
402-554-2152
cebdon@unomaha.edu
Meagan VanGelder, Coordinator
College of Public Affairs \& Community Service (CB) 111
402-554-3480
mvangelder@unomaha.edu

## Program Website:

http://www.unomaha.edu/mpa/index.php

## Application Deadlines:

- Fall: June 1
- Spring: October 1
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- The general prerequisite for admission to the MPA program is a four-year bachelors' degree with a minimum 3.0 GPA in the junior and senior years (last 50-60 credit hours)
- Students who plan to attend the MPA program and whose native language is not English may be granted provisional or unclassified admission subject to the following conditions:
- The must complete the TOEFL exam with a score of 550 (213 if computer-based; 79 if internet-based) or better, OR
- IELTS with a score of 6.5 or better, OR
- PTE with a score of 59 or better
- GRE score is required
- Two (2) Letters of Recommendation
- Statement of Purpose/Admissions Essay
- The essay should be two to four pages (doubledspaced and answer the following questions:
- Please tell us about the factors in your background that will help us understand your interest in a profession in the public or nonprofit sectors.
- What are your professional goals? Ten years from now, what do you hope to be doing professionally?
- How can an MPA from UNO help you to achieve these goals?
- Resume
- Generally, students will be admitted unconditionally if they have a strong undergraduate record, demonstrate good communication skills in their admission essay, receive favorable recommendations, and have goals consistent with the mission of the MPA program.


## MPA DEGREE REQUIREMENTS

## MPA Required Courses ( $\mathbf{2 1}$ hours):

The School of Public Administration has seven (7) core courses required for all MPA students. Three introductory core classes must be completed prior to any other coursework.

## Introductory Core:

| PA 8050 | Public Administration and <br> Democracy | 3 |
| :--- | :--- | ---: |
| PA 8090 | Organization Theory and Behavior | 3 |
| PA 8010 | The Public Economy | 3 |
| PA | Research Methods for Public | 3 |
| $8120 /$ AVN | Administration |  |
| 8120 |  |  |

PA 8120: (or PSCI 8000 at UNO)
Ending Core:
PA $8300 \quad$ Policy Design and Implementation
One of the following:
PA $8320 \quad$ Public Policy Evaluation
PA 8450 Seminar in Advanced Management 3
Analysis in Public Agencies
PA $8330 \quad$ Seminar in Policy Analysis
POLS 836 at UNL is an acceptable substitute for PA 8320
One of the following:
PA $8440 \quad$ Organization Develop. \& Planned 3
PA 8530 Strategic Planning \& Mgmt in Public
**The ending core requires the completion of the beginning core. The ending core, except for PA 8300, also requires the completion of at least 24 hours in the MPA program. The Capstone Project, PA 8990, is the required ending course to complete the MPA degree unless the thesis option is selected.

## MPA Concentrations

See M.P.A. Concentrations (p. 145)

## MPA Specializations

See M.P.A. Specializations (p. 147)

## MPA Exit Requirements:

| PA 8990/PA | Capstone Project in Public | 3 |
| :--- | :--- | ---: |
| 4990 | Administration |  |
| OR 8990/PA | Capstone Project in Public | 3 |
| 4990 | Administration |  |

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms, and final approval and submission of the thesis.

## TOTAL CREDIT HOURS:

Non-Thesis Option: 39
Thesis Option: 42
The Non-Thesis Option requires students to complete the 21-hour core and 18 additional hours of graduate elective courses in an area of concentration.

The Thesis Option requires students to complete the 21hour core, 15 additional hours of graduate elective courses in an area of concentration, and 6 hours of thesis. The thesis must be assigned a total of at least six hours on the approved plan of study. The thesis should be initiated no later than one semester before the anticipated date of graduation in order to provide sufficient time for research, writing and examination. It is the responsibility of the student to follow all regulations found at http://www.unomaha.edu/graduate/thesis.php?t=c.
The student must orally defend his or her thesis. At that time, the supervisory committee must sign the acceptance page of the thesis. Approval of a thesis by every member of the thesis supervisory committee is required.

## M.P.A. CONCENTRATIONS

## AVIATION CONCENTRATION

## Required Courses ( 15 hours):

AVN 8060 Transportation Security 3
AVN 8250 Airport Administration 3
AVN 8360 Transportation Safety 3
AVN 8370 Airport Development 3
AVN 8750 Transportation Finance 3

## HEALTH ADMINISTRATION CONCENTRATION

## Required Courses (9 hours): <br> HSRA 872 Health Care Finance <br> HSRA 874 Health Care Policy <br> HSRA 876 US Health Care Delivery System

The above courses are offered through UNMC.
Elective Courses (6 hours):

| GERO | Long-Term Care Administration | 3 |
| :--- | :--- | :--- |
| 8516/GERO |  |  |
| 4510/PA |  | 3 |
| 4510/PA |  |  |
| 8516 |  |  |
| GERO | Health Aspects of Aging |  |
| 8556/GERO |  | 3 |
| 4550/HED |  | 3 |
| 4550/WGST |  |  |
| 4550/HED |  | 3 |
| 8556 |  | 3 |
| GERO 8696 | Working with Minority Elderly |  |
| GERO | Programs and Services for the | 3 |
| 8676/GERO | Elderly |  |
| 4670 |  |  |
| HED 8600 | Health Behavior |  |
| HED 8700 | Women's Health Issues | 3 |
| HED 8850 | Health Aspects of Stress |  |
| PA 8730 | Management | Administration of Health Care |

Elective Courses at UNMC
PSM 802 Ethics in Health Care
PSM 806 Biostatistics I
PSM 820 Epidemiology: Theory and Applications

## LOCAL GOVERNMENT CONCENTRATION

## Required Courses (9 hours):

| PA 8410 | Public Human Resource <br> Management | 3 |
| :--- | :--- | ---: |
| PA 8436 | Municipal Administration | 3 |
| PA | Seminar in Public Financial | 3 |
| 8480/AVN | Administration |  |
| 8480 |  |  |
| PA 8400 | OR |  |
| Public Budgeting | 3 |  |

Elective Courses (6 hours):
PA 8030 Internship in Public Administration 3
PA 8040 Internship in Public Administration 3
PA $8400 \quad$ Public Budgeting 3
PA 8470 Administrative Ethics and 3
PA 8566/PA Intergovernmental Management
4560

| PA 8600 | Administrative Law | 3 |
| :--- | :--- | :--- |
| PA 8616 | Municipal Law | 3 |
| GEOG 8120 | Urban Geography | 3 |
| ECON 8500 | Seminar in Urban Economics | 3 |
| UBNS | Race, Ethnicity and American Urban | 3 |
| 8020/BLST | Culture |  |
| 8020 |  | 3 |
| THEA 8806 | Introduction to Urban Planning | 3 |
| CIVE 8610 | Urban Transportation |  |
| PA 8420 | Public Works Management | 3 |
| NONPROFIT MANAGEMENT |  |  |
| CONCENTRATION |  |  |

Required Courses (6 hours):

| PA 8550 | Introduction to the Non-Profit Sector | 3 |
| :--- | :--- | :--- |
| PA | Seminar in Public Financial | 3 |
| 8480/AVN | Administration |  |

8480
PA 8996 Special Topics: Nonprofit Finance 3
Elective Courses (9 hours):
PA $8106 \quad$ Marketing in Public, Non-Profit and 3
PA 8110 Managing Information in the Public 3
PA 8206/PA Community Organizing \& Social 3
4200 Change
PA 8520 Seminar in Grant Writing 3
PA 8580 Management and Administration of 3
Non Profit Organizations
PA 8596 Techniques Topics in NonProfit 1 -
Management 3
PA 8710 Fund Raising in Public and Non- 3
Profit Organizations
PA $8930 \quad$ Negotiation Skills in General 3

Other courses from other fields of study where nonprofit organizations are active can be included for elective credit. Examples include health specialization courses, courses in fine arts administration, museum studies, and social work. Check with your advisor to determine if a class offered outside the school can be included in your degree program.

NOTE: PA 8596 may be taken twice for credit (3 hours each) if the content of the two semesters is different.

## PUBLIC MANAGEMENT CONCENTRATION

Required Courses (6 hours):
PA 8400 Public Budgeting 3
PA $8410 \quad$ Public Human Resource 3
Management
Elective Courses (9 hours):
PA 8110 Managing Information in the Public 3
Sector
PA 8320 Public Policy Evaluation

| PA 8330 | Seminar in Policy Analysis |
| :---: | :---: |
| PA 8440 | Organization Develop. \& Planned |
|  | Change in the Public Sector |
| PA 8450 | Seminar in Advanced Management |
|  | Analysis in Public Agencies |
| PA 8470 | Administrative Ethics and |
|  | Leadership |
| PA | Seminar in Public Financial |
| 8480/AVN | Administration |
| 8480 |  |
| PA 8500 | Issues in Public-Private Sector |
|  | Cooperation |
| PA 8530 | Strategic Planning \& Mgmt in |
|  | Public \& Non-Profit Organiz. |
| PA 8550 | Introduction to the Non-Profit Sector |
| PA 8566/PA | Intergovernmental Management |
| 4560 |  |
| PA 8600 | Administrative Law |
| PA 8896/PA | Critical Issues in Aviation |
| 4890/AVN | Administration |
| 4890/AVN |  |
| 8896 |  |
| PA 8930 | Negotiation Skills in General |
|  | Management |
| PA 8420 | Public Works Management |
| TRANSPORTATION CONCENTRATION |  |
| Required Courses (9 hours): |  |
| AVN 8360 | Transportation Safety |
| PA 8400 | Public Budgeting |
|  | OR |
| AVN 8750 | Transportation Finance |
| CIVE | Urban Transportation Planning |
| 861/CIVE |  |
| 461 |  |
| Elective Courses (6 hours): |  |
| PA | Seminar in Public Financial |
| 8480/AVN | Administration |
| 8480 |  |
| UBNS 8066 | Introduction to Urban Planning |
| AVN 8060 | Transportation Security |
| CIVE | Airport Planning and Design |
| 868/CIVE |  |
| 468 |  |
| CIVE 864 | Analysis and Estimation of |
|  | Transportation Demand |

PUBLIC POLICY CONCENTRATION (NONTHESIS OPTION ONLY)

| Required Courses (12 hours): |  |  |
| :--- | :--- | :--- |
| PA 8320 | Public Policy Evaluation | 3 |
| PA 8330 | Seminar in Policy Analysis | 3 |
| PA 8400 | Public Budgeting | 3 |
| PA 8600 | Administrative Law | 3 |


| Elective Courses (3 hours) |  |  |
| :--- | :--- | :--- |
| PA 8450 | Seminar in Advanced Management | 3 |
|  | Analysis in Public Agencies |  |
|  | Other approved methods course | 3 |
|  | Advanced course in a policy area | 3 |

## PUBLIC WORKS CONCENTRATION

| Required Courses (12 hours): |  |  |
| :---: | :---: | :---: |
| PA 8410 | Public Human Resource | 3 |
|  | Management |  |
| PA 8420 | Public Works Management | 3 |
| PA | Seminar in Public Financial | 3 |
| 8480/AVN | Administration |  |
| 8480 |  |  |
|  | OR |  |
| PA 8400 | Public Budgeting | 3 |
| UBNS 8060 | Introduction to Urban Planning | 3 |

Elective Courses (3 hours):

| CIVE 8610 | Urban Transportation |
| :--- | :--- |
| CRP | Introduction to Planning |

8006/CRP
4000
ECON 8850 Seminar in Urban Economics 3
GEOG Urban Geography
8126/GEOG
4120
PA 8030 Internship in Public Administration 3
PA 8040 Internship in Public Administration 3
PA 8110 Managing Information in the Public 3
PA $8400 \quad$ Public Budgeting 3
PA 8436 Municipal Administration 3
PA 8470 Administrative Ethics and 3
Leadership
PA 8566/PA Intergovernmental Management 3
4560
PA 8600 Administrative Law 3
PA 8616 Municipal Law 3
UBNS Race, Ethnicity and American Urban 3
8020/BLST Culture
8020

## M.P.A. SPECIALIZATIONS

## CRIMINOLOGY AND CRIMINAL JUSTICE SPECIALIZATION

| Required Courses (6 hours): |  |  |
| :--- | :--- | ---: |
| PA 8400 | Public Budgeting |  |
|  | OR | 3 |
| PA | Seminar in Public Financial | 3 |
| $8480 /$ AVN | Administration |  |
| 8480 | Public Human Resource |  |
| PA 8410 | Management | 3 |
|  |  |  |

## Elective Courses (9 hours):

CRCJ 8010 Nature of Crime 3
CRCJ 8020 Seminar in Administration of Justice 3
CRCJ 8040 Seminar in Police and Society 3
CRCJ 8050 Seminar in Corrections 3
CRCJ 8060 Seminar in the Criminal Court 3
System
CRCJ 8100 Criminal Justice Organization,
Administration and Management OR
CRCJ 8110 Criminal Justice Planning and Change
CRCJ 9110 Seminar on Police Organization and Management

CRCJ 9110: permission required
Other graduate courses in criminology \& criminal justice may be appropriate depending upon the student's interests and background. CRCJ 8090 (Independent Study) is not recommended.

## INFORMATION MANAGEMENT SPECIALIZATION

Please note: A module needs to be complete prior to enrolling in the specialization courses. Please contact advisor Peter Wolcott.
Required Courses ( 6 hours):

| PA 8110 | Managing Information in the Public <br>  <br> Sector |
| :--- | :--- |
| ISQA | Information and Data Quality |
| $8206 /$ ISQA | Management |
| 4200 |  |

Elective Courses (9 hours):

| ISQA 8196 | Process Reengineering with <br> Information Technology | 3 |
| :--- | :--- | :--- |
| ISQA | Telecommunications Management | 3 |
| 8230/CSCI |  |  |
| 8220 |  | 3 |
| ISQA 8250 | Facilitation of Collaborative | 3 |
|  | Problem Solving | 3 |
| ISQA 8420 | Managing the IS Function | 3 |
| ISQA 8570 | Information Security Policy and | 3 |
|  | Ethics | 3 |
| ISQA 8736 | Decision Support Systems | 3 |
| ISQA 8810 | Information Technology Project | 3 |

PUBLIC ADMINISTRATION, PH.D.
School of Public Administration, College of Public Affairs \& Community Service
Vision Statement
The $\mathrm{Ph} . \mathrm{D}$. program in public administration is a research degree in public administration. Its focus is on public
sector organizations and their role in a democratic and diverse society. The goal of the public administration doctoral program is the development of a cadre of academicians and senior practitioners who will make significant contributions to knowledge development in the field.

Because the doctoral program seeks to provide students with the competencies necessary to achieve distinction in higher education or leadership positions in public administration, the faculty expects students to exhibit a serious and well-thought-out commitment to the profession of public service in a democratic and diverse society. The doctoral program assists students in their individual development toward a professional sense of responsibility and public accountability, providing a foundation for a successful career in academia or in public administration.

## Program Contact Information:

Dr. Gary Marshall
College of Public Affairs \& Community Service (CB) 116D
402-554-2962
gmarshal@unomaha.edu
Meagan VanGelder, Coordinator
College of Public Affairs \& Community Service (CB) 111
402-554-3480
mvangelder@unomaha.edu

## Program Website:

http://www.pubadphd.unomaha.edu/

## Application Deadlines:

- For applicants seeking a funded graduate assistantship: February 1
- For all other applicants: June 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- An earned Master's degree in public administration or related field from an accredited institution.
- Generally, the target master's degree level GPA is above 3.20 (on a 4.0 scale).
- Applicants whose language of nurture is not English and who do not have a Master's degree from an institution located in a country whose primary language is English should present a TOEFL score of 550 or higher on the written examination (213 if computerbased; 79-80 if internet-based). International applicants are expected to demonstrate the ability to communicate orally and in writing in a manner sufficient to compete effectively at the doctoral level.
- An IELTS score of 6.5 or better or a PTE score of 53 or better can be submitted.
- Graduate Record Examination (GRE): combined scores of at least 305 on the verbal and quantitative portions of the exam, and a score from the new analytical writing section
- At least 3 Letters of Recommendation, two of which must come from academic references
- Statement of Purpose
- A statement of purpose, not to exceed 5 doublespaced, type-written pages, explaining why the student wishes to pursue a doctoral degree in public administration. The statement of intent should also address the applicant's interest in one of the six areas of specialization listed below. These statements are reviewed for quality of writing, academic sophistication, and the extent to which the applicant's goals are compatible with the strengths and interests of the public administration faculty and the stated objectives of the program.
- Resume
- The resume will be examined to assess an applicant's professional work experience and/or extracurricular activities while attending school. Additionally, resumes are examined to assess an applicant's potential ability to understand and do research on the context and practice of contemporary public management.
- Students are responsible for additional information found on the Doctor of Philosophy in Public Administration web page at: http://www.pubadphd.unomaha.edu.
- The Doctoral Program Committee reviews student academic preparation, specifying appropriate courses that must be taken as prerequisites to doctoral study. Except for those who have completed an MPA degree, all new doctoral students must first complete 12 hours
of MPA course prerequisites prior to enrolling in 9000level core or research courses.


## PAPHD DEGREE REQUIREMENTS

## MPA Prerequisites

| PA 8050 | Public Administration and | 3 |
| :--- | :--- | :--- |
|  | Democracy |  |
| PA 8090 | Organization Theory and Behavior | 3 |
| PA 8010 | The Public Economy | 3 |
| PA | Research Methods for Public | 3 |
| $8120 /$ AVN | Administration |  |
| 8120 |  |  |

## PAPHD Required Courses:

90 hours of graduate credit hours beyond the baccalaureate degree. This includes 12 hours of core courses, 9 hours of research courses, 6 hours each in two areas of specialization ( 12 hours total), a 1-hour workshop in teaching and professional skills, 20 hours of dissertation coursework, and 36 hours of additional graduate-level coursework. The 36 hours of additional graduate-level coursework may be earned from an accredited institution toward a Master of Public Administration degree or a master's degree (MA or MS) in a related academic discipline or field.

## Core Courses: $\mathbf{1 2}$ hours

Research Courses: 9 hours
Area Specialization Courses: $\mathbf{1 2}$ hours
Workshop: 1 hour
Dissertation: 20 hours
Additional graduate-level coursework (from master's degree): $\mathbf{3 6}$ hours

## Required Courses:

Core Courses (12 hours):
PA 9000 Foundations of Public 3
Administration
PA 9300 Knowledge Development \& Use in
the Public Service Profession
PA 9400 The Environment of Public
Administration
PA 9600 Seminar in Advanced Management Theory

## Research Courses (9 hours):

Research is an integral aspect of doctoral education. The faculty expects that graduates of the program will have the ability to contribute original and systematically rigorous knowledge to the field. Thus, the Ph.D. in public administration requires three research courses. These courses focus on logic and techniques of basic and applied research in public administration. They include:
PA $9950 \quad$ Quantitative Methods in Public
Administration

| PA 9960 | Qualitative Research Methods | 3 |
| :--- | :--- | :--- |
| PA 9800 | Advanced Research Design | 3 |

Students fully admitted and enrolled in another doctoral program can take one or more of the required research courses, but only upon the approval of the instructor.
Areas of Specialization ( 6 hours each in two of the following areas):
Management Information in the Public Sector
Public Administration Theory
Public Aviation and Transportation
Public Budgeting and Finance
Public Policy
Urban Management
Workshop:
PA 9920
(1 hour)

## PAPHD Exit Requirements:

PA 9990 Dissertation
(20 hours)

## Progress Review

The Doctoral Program Committee will conduct a review of student progress each year. The Committee will make such recommendations as appropriate to the student's advisor. As part of the review, students will be required to submit a summary of annual progress.

## Field Examination

Following completion of all coursework, doctoral students take the field examination, covering work in the areas of specialization and related research methods. The purpose of the field exam is for the doctoral student to demonstrate his or her mastery of the area in which the dissertation will be conducted. The field exam testing periods are September 1-November 15 in the fall semester and February 1-April 15 in the spring semester. The field exam is given in closed-book format in an eight-hour period, which can be divided into two four-hour sessions. The exam is designed and graded by the student's Supervisory Committee.

## Degree Candidacy

Students who have successfully passed the required coursework in their program of study and the field examination apply for Admission to Candidacy for the Doctoral Degree. This application requires majority consent of the student's Supervisory Committee, the Doctoral Program Committee, and the Dean for Graduate Studies.

After admission to degree candidacy, the student must maintain continuous enrollment until he/she receives the degree. The school monitors this enrollment. Students not in residence must register for a minimum of one semester credit hour of dissertation research. Failure to register during each academic semester will result in termination of the Candidacy.
The time limit on granting the Ph.D. in public administration degree is eight (8) years from the time of filing the plan of study in the Office of Graduate Studies.
Quality of Work Standards:
GPA of at least 3.35 for all coursework
No more than one grade of $\mathrm{C}+$ or below
Must maintain continuous enrollment
Must establish program residency through completion of 24 hours in 24 months
Total Credit Hours: 90

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*** MSWIMPA ***
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## PUBLIC MANAGEMENT CERTIFICATE

## School of Public Administration, College of Public Affairs \& Community Service

## Vision Statement

The purpose of the Certificate in Public Management is to allow working professionals with careers in the public sector or graduate students in a related field of study (such as political science or city and regional planning) to expand their educational background and to enhance their knowledge in the area of public management. The graduate certificate is designed to extend students' understanding of theory and practice in the field of public management.

## Program Contact Information:

Dr. Carol Ebdon, Graduate Program Chair (GPC)
College of Public Affairs \& Community Service (CB)
111B
402-554-2152
cebdon@unomaha.edu
Meagan VanGelder, Coordinator
College of Public Affairs \& Community Service (CB) 111
402-554-3480
mvangelder@unomaha.edu
Program Website:
http://www.unomaha.edu/mpa/index.php

## Application Deadlines:

- Fall: June 1
- Spring: October 1
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Students must have 3 years of work experience in the public sector.
- The general prerequisite for admission to the Graduate Certificate in Public Management program is a fouryear bachelors' degree with a minimum of a 3.0 GPA of the junior-senior year (last 50-60 credit hours).
- Students who plan to attend the program from foreign countries where English is not their native language may be granted provisional or unclassified admission subject to the following conditions:
- TOEFL exam with a score of 550 (or 213 on the computer-based TOEFL or 79 on the Internet-based TOEFL) or better, or IELTS with a score of 6.5 or better, or Pearson with a score of 59 or better.
- Two (2) letters of recommendation
- Statement of purpose
- 2-4 pages double spaced, answering the following questions:
- Why are you pursuing the certificate?
- What are your goals?
- Resume


## CERT-PUBM DEGREE REQUIREMENTS

Cert-PUBM Required Courses ( $\mathbf{1 2}$ hours):

| PA 8050 | Public Administration and |
| :--- | :--- |
|  | Democracy |
| PA 8410 | Public Human Resource |

Management
PA 8090
PA
8480/AVN
8480

Organization Theory and Behavior 3
Seminar in Public Financial
Administration

Other electives relevant to students’ occupation or interests will be considered on a case by case basis

| Cert-PUBM Elective Course ( 3 hours; select one course from below): |  |  |
| :---: | :---: | :---: |
| PA 8110 | Managing Information in the Public Sector | 3 |
| PA 8420 | Public Works Management | 3 |
| PA 8470 | Administrative Ethics and | 3 |
|  | Leadership |  |
| PA 8436 | Municipal Administration | 3 |

## Cert-PUBM-Other Program-Related Information:

The certificate in Public Management can be obtained online.

Total Credit Hours: 15
Social Work
M.S.W.

## Grace Abbott School of Social Work, College of Public Affairs \& Community Service

## Vision Statement

The mission of the Grace Abbott School of Social Work at the University of Nebraska at Omaha is to educate students to become highly qualified social workers who serve people of all ages and influence the systems that affect them; to advance knowledge through teaching and research; and to engage with diverse communities to promote socially just societies.
The primary purpose of the social work profession is to enhance human well-being. Social workers help to meet the basic human needs of all people and empower those who are vulnerable, oppressed, or affected by poverty. The social work profession was founded on a set of core principles that still guide its unique purpose and perspective today:

- Service
- Social justice
- Dignity and worth of the person
- Importance of human relationships
- Integrity
- Competence

Social Work maintains a dual focus on individual wellbeing in a social context and on the betterment of society. Social workers seek to enhance the capacity of people to address their own needs, helping people to identify and address the environmental forces that create and contribute to problems in living. For over 100 years, social workers have worked to promote social justice and social change with and on behalf of individuals, families, groups, organizations and communities, helping millions of people to challenge their circumstances and change their lives, and promoting the responsiveness of organizations, communities, and other social institutions to individuals' needs and social problems.
Social workers are sensitive to cultural and ethnic diversity and strive to end discrimination, oppression, poverty, and other forms of social injustice. These activities may be in the form of direct practice, community organizing, supervision, consultation, administration, advocacy, social and political action, policy development and implementation, education, research and evaluation.

## Program Contact Information: (Social Work)

Dr. Peter Szto, Graduate Program Chair (GPC)
College of Public Affairs \& Community Service (CB) 205
402-554-2330
pszto@unomaha.edu

## Program Website:

http://www.unomaha.edu/socialwork/graduate.php\#advanc ed

## Application Deadlines:

- Fall: January 15
- Spring: NA
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Undergraduate GPA of 3.0 (if your cumulative GPA is between 2.75 and 2.99, a GRE or MAT score may be submitted).
- Three (3) Letters of Recommendation
- Statement of Purpose: Please answer the following statements/questions in a total of five (5) doublespaced, typewritten pages (12-point font). Your application is considered incomplete if these instructions are not followed.
- A brief autobiographical statement that discusses who you are and the experiences that led you to social work. Trace the development of your interest in social work. Why have you chosen social work as a profession? Describe the key motivating figure(s), role model(s), or experience(s) important to your decision to become involved in social work.
- Discuss your career objectives as a professional social worker as you now conceive them. What do you see yourself doing immediately after receiving your MSW?
- Discuss a contemporary social problem. Include possible causes and potential solutions in your response. What contribution do you want to make to the pursuit of social and economic justice?
- In the School's criteria for admission, we assert our commitment in having students that represent diverse backgrounds. Diversity is defined by virtue of: personal characteristics such as race, gender, age, sexual orientation, disability, and geography, as well as life experiences such as career history, experience dealing with a significant personal challenge, belonging to or working in or among another culture, economic disadvantage, knowledge of more than one language, and/or deep broad life experiences. What evidence can you present to demonstrate your capacity to work with human diversity?
- Resume
- Completion of these prerequisite courses is required before entry into the program:
- An undergraduate human biology course or equivalent
- An undergraduate research methods course
- An undergraduate statistics course


## MSW DEGREE REQUIREMENTS

MSW Foundation Program Required Courses (24 hours):
SOWK 8070 Human Behavior and the Social Environment I

SOWK 8080 Human Behavior and Social 3
Environment II
SOWK 8090 Social Welfare Policy 3
SOWK 8110 Institutional Oppression 3
SOWK 8130 Generalist Practice I 3
SOWK 8150 Generalist Practice II 3
SOWK 8160 Generalist Social Work Practicum I 3
SOWK 8170 Generalist Social Work Practicum II 3
Waiver examinations are available for SOWK 8070 and SOWK 8090. See Academic Policies \& Standards for more information on deficiencies, waivers, and transfers of credit:
www.unomaha.edu/socialwork/documents/academic_polic ies.pdf.

## MSW Advanced Standing Concentrations

See M.S.W. Advanced Standing Concentrations (p. 153)

## MSW Exit Requirements:

Comprehensive Examination
The comprehensive examination is offered twice each academic year, during the Fall and Spring semesters. It is recommended that students take the exam during the semester of graduation, but they may take it earlier provided no more than 12 semester hours are remaining to complete after the semester in which the comprehensive exam is taken.
Students must enroll in a minimum of two courses (6 hours) per semester
excluding summer semesters.
Students must seek prior approval from the director of the Grace Abbott School of Social Work if they wish to take more than $\mathbf{1 2}$ hours of coursework in a semester.
Program requirements must be completed within four years.

Exceptions can be requested from the Director.
TOTAL CREDIT HOURS:
Foundation Program +Advanced Standing Program: 63 Advanced Standing Program only: 39

## Academic Policies and Standards

- A student must maintain a cumulative grade point average of 3.0 or higher in all graduate work taken as part of the MSW program, including courses taken for a certificate. Additionally, a student must receive a grade of B or higher in practicum courses (SOWK 8160, SOWK 8170, SOWK 8400, SOWK 8410, and SOWK 8420).
- A student whose cumulative GPA drops below 3.0 or who receives a grade of $\mathrm{C}+$ ( 2.33 on a 4.0 scale) or below in nine (9) or more hours will be considered in academic difficulty and will receive a Student Review.

If a student receives a grade in a practicum that is lower than a B, he or she will receive Level 2 or 3 Review, depending on whether the student has had a previous Review. If a student is on academic probation and receives a grade of B - or lower, the School will recommend that the Office of Graduate Studies dismiss the student from the program. (Probation means that a grade of B [ 3.0 on a 4.0 scale] or higher is required for all courses taken.)

- When a student is dismissed from the MSW program by the Office of Graduate Studies, a student may request reinstatement, if the student was "in good standing" prior to the incident leading to dismissal.
- The Academic Policies and Standards can be found at: www.unomaha.edu/socialwork/documents/academic_p olicies.pdf.


## MSW-Other Program-Related Information:

- The Master of Social Work (MSW) program prepares students for advanced social work practice. Master's level social workers are employed in public and private agencies, including medical settings, schools, residential treatment centers, court and correctional agencies, and community planning and development agencies. Their activities and interventions are designed to promote a more effectively-functioning society as it struggles to "provide for the general welfare," as well as to help people, families, groups and institutions within that society achieve self-fulfillment.
- The MSW degree at the Grace Abbott School of Social Work is accredited by the Council on Social Work Education (CSWE), the national accrediting body for all social work education.
- Information on certification and licensure is available on the Nebraska Department of Health and Human Services website: www.unomaha.edu/socialwork/certification.php.


## M.S.W. ADVANCED STANDING CONCENTRATIONS

## MSW ADVANCED STANDING-ADV ANCED GENERALIST SOCIAL WORK PRACTICE CONCENTRATION

Required Courses (39 hours)
SOWK 8190 Research \& Computer Applications 3
SOWK 8220 Clinical Social Work with 3 Individuals
SOWK 8250 Social Work Practice with Families 3
SOWK 8510 Supervision and Personnel 3 Administration
SOWK 8540 Social Welfare Planning 3
SOWK 8560 Advanced Community Practice 3

A social work advanced macro practice course:
SOWK 8550 Social Justice and Social Advocacy 3
SOWK 8570 Administration of Social Welfare 3
Agencies
A social work advanced research course:
SOWK 8940 Evaluation of Social Programs 3
SOWK 8950 Research Methods in Clinical 3
Practice
SOWK 8960 Research Other Than Thesis 3
SOWK 8990 Master's Thesis 3-
SOWK 8400 Advanced Social Work Practicum I 3
SOWK 8410 Advanced Social Work Practicum II 3 -

## Three social work electives

up to two (2) can be graduate/undergraduate joint courses (ending in -6):
$\begin{array}{ll}\text { SOWK 8230 } & \text { Clinical Social Work with Groups } \\ \text { SOWK 8240 } & \text { Social Work Practice with Children }\end{array}$
SOWK 8260 Social Work Practice with Older Adults
SOWK 8270 Social Work Practice with Sexual 3
Concerns
SOWK 8280 Social Work Practice with Couples 3 and Changing Family Structures
SOWK 8290 Social Work Practice in Health and 3
SOWK 8420 Advanced Social Work Practicum 1III
SOWK Treatment Issues in Chemical 3
8516/COUN
8516/SOWK
4510/COUN
4510
SOWK 8550
SOWK 8600
SOWK 8610
SOWK 8650
SOWK
8696/COUN
8696/SOWK
4690/COUN
4690
SOWK 8806
SOWK 8816
SOWK 8856 Hospice \& Other Services for the Dying Patient/Family
SOWK 8866 Women's Issues and Sexism: A Social Work Perspective
SOWK Topical Seminar in Social Work
8886/SOWK
4880

SOWK 8900 Special Studies in Social Welfare 1 3

SOWK 8550: if not taken for the advanced macro practice course

| MSW Advanced Standing-Clinical Social Work Concentration ( $\mathbf{3 9}$ hours) |  |
| :---: | :---: |
| SOWK 8190 | Research \& Computer Applications |
| SOWK 8220 | Clinical Social Work with Individuals |
| SOWK 8230 | Clinical Social Work with Groups |
| SOWK 8250 | Social Work Practice with Families |
| SOWK 8290 | Social Work Practice in Health and Mental Health |
| SOWK 8510 | Supervision and Personnel Administration |
| SOWK 8650 | Health/Mental Health Policy for Social Work |

A social work advanced clinical practice course:
SOWK 8240 Social Work Practice with Children 3
SOWK 8260 Social Work Practice with Older 3 Adults
SOWK 8270 Social Work Practice with Sexual 3 Concerns
SOWK 8280 Social Work Practice with Couples 3

A social work advanced research course:
SOWK 8940 Evaluation of Social Programs 3
SOWK 8950 Research Methods in Clinical 3 Practice
SOWK 8960 Research Other Than Thesis 3
SOWK 8990 Master's Thesis 3-
SOWK 8400 Advanced Social Work Practicum I 3
SOWK 8410 Advanced Social Work Practicum II 3 -

Two social work electives
(one can be graduate/undergraduate [ending in -6]):
SOWK 8230 Clinical Social Work with Groups 3
SOWK 8290 Social Work Practice in Health and 3
SOWK 8420 Advanced Social Work Practicum 1 -
III 3
SOWK Treatment Issues in Chemical 3
8516/COUN Dependency
8516/SOWK
4510/COUN
4510
SOWK 8540 Social Welfare Planning 3
SOWK 8550 Social Justice and Social Advocacy 3
SOWK 8560 Advanced Community Practice 3
SOWK 8600 Permanence for Children 3
SOWK 8610 Family and Community Violence 3
SOWK 8650 Health/Mental Health Policy for 3

|  | Social Work |
| :---: | :---: |
| SOWK | Assessment and Case Management in Substance Abuse |
| 8696/COUN |  |
| 8696/SOWK |  |
| 4690/COUN |  |
| 4690 |  |
| SOWK | Assessment and Case Management in Substance Abuse |
| 8696/COUN |  |
| 8696/SOWK |  |
| 4690/COUN |  |
| 4690 |  |
| SOWK 8806 | Social Work and the Law |
| SOWK 8816 | Spirituality and Social Work |
|  | Practice |
| SOWK 8856 | Hospice \& Other Services for the |
|  | Dying Patient/Family |
| SOWK 8866 | Women's Issues and Sexism: A |
|  | Social Work Perspective |
| SOWK ${ }_{\text {8886/SOWK }}$ Topical Seminar in Social Work |  |
|  |  |  |
| 4880 |  |
| SOWK 8900 | Special Studies in Social Welfare |
| Student may also select from the following if not taken for the advanced clinical practice course: |  |
|  |  |  |
| SOWK 8240 | Social Work Practice with Children |
| SOWK 8260 | Social Work Practice with Older |
|  | Adults |
| SOWK 8270 | Social Work Practice with Sexual |
|  | Concerns |
| SOWK 8280 | Social Work Practice with Couples |
|  | and Changing Family Structures |
| MSWMP |  |

## M.S.W./M.P.H.

## Grace Abbott School of Social Work

College of Public Affairs \& Community Service
College of Public Health, University of Nebraska Medical Center

## Vision Statement

The dual degree program in MSW/MPH prepares highly skilled professionals with competence in both social work practice (health and mental health) and in public health. Graduates will have the knowledge and skills to engage in a variety of administrative tasks necessary to the promotion of community health and mental health: policy analysis, assessment of community needs, program development and administration, personnel management, grant writing, developing community capacity, training, and program implementation and evaluation. In addition, graduates will also be able to engage in practice across the continuum of care with health and mental health problems,
including prevention, crisis intervention, clinical intervention, and rehabilitation services, especially with populations at risk.

## Program Website:

http://www.unomaha.edu/socialwork/graduate.php\#mph

## Application Deadlines:

- Fall: January 15
- Spring: NA
- Summer: NA
- The MPH application is completed online through the College of Public Health at the University of Nebraska Medical Center: see website for application deadline.


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Undergraduate GPA of at least 3.0 in courses related to proposed major


## Program-Specific Requirements:

- Undergraduate GPA of 3.0
- Three (3) Letters of Recommendation
- Statement of Purpose
- Please answer the following statements/questions in a total of five (5) double-spaced, typewritten pages (12 point font). Your application is considered incomplete if these instructions are not followed.
- A brief autobiographical statement that discusses who you are and the experiences that led you to social work. Trace the development of your interest in social work. Why have you chosen social work as a profession? Describe the key motivating figure(s), role model(s), or experience(s) important to your decision to become involved in social work.
- Discuss your career objectives as a professional social worker as you now conceive them. What do you see yourself doing immediately after receiving your MSW degree?
- Discuss a contemporary social problem. Include possible causes and potential solutions in your response. What contribution do you want to make to the pursuit of social and economic justice?
- In the School's criteria for admission, we assert our commitment in having students representing diverse backgrounds. Diversity is defined by virtue of: personal characteristics such as race, gender, age, sexual orientation, disability, and geography, as well as life experiences such as career history, experience dealing with a significant personal challenge, belonging to or working in or among another culture, economic disadvantage, knowledge of more than one language, and/or deep broad life experiences. What evidence can you present to demonstrate your capacity to work with human diversity.
- Please review the Social Work admission requirements for additional information and details regarding the essay requirement.
- Resume
- Completion of the following prerequisite courses is required before entry into the program:
- An undergraduate human biology course or equivalent
- An undergraduate research methods course
- An undergraduate statistics course


## MSW-MPH DEGREE REQUIREMENTS

## MSW-MPH Foundation Courses ( 24 hours):

Students admitted to the dual degree program who do not have a BSW must start the program at the Social Work graduate foundation level, which consists of the following 24 hours, thus bringing the total hours required for these students to 81 .
SOWK 8070 Human Behavior and the Social Environment I
SOWK 8080 Human Behavior and Social Environment II
SOWK 8090 Social Welfare Policy
SOWK 8110 Institutional Oppression
SOWK 8130 Generalist Practice I
SOWK 8150 Generalist Practice II
SOWK 8160 Generalist Social Work Practicum I
SOWK 8170 Generalist Social Work Practicum II
*Waiver examinations are available for SOWK 8070 and 8090. See Academic Policies \& Standards for more information on deficiencies, waivers, and transfers of credit:
www.unomaha.edu/socialwork/documents/academic_polic ies.pdf.

MSW-MPH Required Courses ( 57 hours):
CPH $500 \quad$ Foundations of Public Health 3
CPH 501 Health Behavior 3
CPH 502 Health Services Administration 3
CPH 503 Public Health, Environment, \& 3 Society
CPH 504 Epidemiology in Public Health 3
CPH 506 Biostatistics I 3
CPH 565 Health Care Finance 3
CPH 566 Health Care Policy 3
SOWK 8190 Research \& Computer Applications 3
SOWK 8220 Clinical Social Work with 3
Individuals
SOWK 8230 Clinical Social Work with Groups 3
SOWK 8270 Social Work Practice with Sexual 3 Concerns
SOWK 8290 Social Work Practice in Health and 3
Mental Health
SOWK 8510 Supervision and Personnel 3
Administration
SOWK 8540 Social Welfare Planning 3
SOWK Medical and Psychosocial Aspects
8686/COUN of Alcohol/Drug Use and Addiction
8686/SOWK
4680/COUN
4680
SOWK 8940 Evaluation of Social Programs 3
SOWK 8400 Advanced Social Work Practicum I 3
SOWK 8410 Advanced Social Work Practicum II 3-

SOWK 8400: (capstone)
SOWK 8410: (service learning)
MSW-MPH Exit Requirements:
Comprehensive Examination
The comprehensive examination is offered twice each academic year, during the Fall and Spring semesters. It is recommended that students take comprehensive examinations during the semester of graduation, but they may take it earlier provided no more than 12 semester hours are remaining to complete the degree after the semester in which the comprehensive examination is taken.
Students must enroll in a minimum of two courses (6 hours) per semester
excluding summer semesters
Students must seek prior approval from the director of the Grace Abbott School of Social Work if they wish to

## take more than 12 hours of coursework in a single semester.

## Program requirements must be completed within six years.

Exceptions can be requested from the Director.
TOTAL CREDIT HOURS:
Foundation Program +Dual-Degree Requirements: 81
Dual-Degree Requirements: 57

## MSW-MPH-Other Program-Related Information:

The Master of Social Work (MSW) program prepares students for advanced social work practice. Master's-level social workers are employed in public and private agencies, including medical settings, schools, residential treatment centers, court and correctional agencies, and community planning and development agencies. Their activities and interventions are designed to promote a more effective-functioning society as it struggles to "provide for the general welfare," as well as to help people, families, groups, and institutions within the society achieve selffulfillment.

The MSW degree at the Grace Abbott School of Social Work is accredited by the Council on Social Work Education (CSWE), the national accrediting body for all social work education.

Information on certification and licensure is available on the Nebraska Department of Health and Human Services' website: www.unomaha.edu/socialwork/certification.php.

## Academic Policies and Standards

A student must maintain a cumulative grade point average (GPA) of 3.0 or higher in all graduate work taken as part of a master's program, including courses taken for a certificate. Additionally, a student must receive a grade of B or higher in social work practicum courses (SOWK 8160, SOWK 8170, SOWK 8410, and SOWK 8420).

A student whose cumulative GPA drops below 3.0 or who receives a grade of $\mathrm{C}+$ ( 2.33 on a 4.0 scale) or below in nine or more hours will be considered in academic difficulty and will receive a Student Review. If a student receives a grade in a practicum that is lower than a $B$, he or she will receive a Level 2 or 3 Review, depending on whether the student has had a previous Review. If a student is on academic probation and receives a grade of B- or lower, the School will recommend that the Office of Graduate Studies dismiss the student from the program. (Probation means that a grade of B [3.0 on a 4.0 scale] or higher is required for all courses taken.)

When a student is dismissed from the MSW program by the UNO Graduate Office, a student may request reinstatement if he or she was "in good standing" prior to the incident preceding the dismissal.

The Academic Policies \& Standards can be found at: www.unomaha.edu/socialwork/documents/academic_polic ies.pdf.

## Social Gerontology

## SOCIAL GERONTOLOGY, M.A.

Department of Gerontology, College of Public Affairs \& Community Service

## Vision Statement

Students pursuing the MA in Social Gerontology are seeking a formalized and in-depth understanding of the aging process by either pursuing a thesis or non-thesis option.

## Program Contact Information:

Dr. Karl Kosloski, Graduate Program Chair College of Public Affairs \& Community Service (CB) 210K
402-554-2964
kosloski@unomaha.edu

## Program Website:

http://www.unomaha.edu/gero/master.php

## Application Deadlines:

Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Graduate Record Exam (GRE) score
- In certain instances, the GRE may be waived for students who possess clear evidence of graduate ability.
- Two (2) Letters of Recommendation


## MASGER DEGREE REQUIREMENTS

MASGER Required Courses (12 hours thesis option-15 hours non-thesis option):

| GERO | Applied Social Gerontology |
| :--- | :--- |
| $9110 /$ SOC |  |
| 9110 |  |
| GERO | Seminar in Aging and Human |
| 9460/PSYC | Behavior |
| 9460 |  |
| GERO | Programs and Services for the |
| 8676/GERO | Elderly |
| 4670 |  |
| GERO 9020 | Graduate Seminar in Statistical |
|  | Applications |
| GERO 8940 | Practicum |

GERO 8940: (non-thesis option only)
MASGER Electives (18 hours thesis option-21 hours non-thesis option):

Any graduate-level Gerontology course can count toward the MA, as well as other courses outside the Department of Gerontology with the advice and consent of the advisor.

## MASGER Exit Requirements:

Thesis Option:
GERO 8990 Thesis

Non-Thesis Option:
Comprehensive Examination
MASGER-Other Program-Related Information:

## Alternative Delivery

Distance courses are available (online) for both the MA and the certificate programs.

## Dual Degree in Social Gerontology and Law

Prospective students must apply to both UNO and UNL. Please refer to the Gerontology Departmental Handbook for more information. If pursuing the dual Social Gerontology and Law degree the LSAT will be accepted in lieu of the GRE.

Total Credit Hours: 36
GERONTOLOGY CERTIFICATE
Department of Gerontology, College of Public Affairs
\& Community Service

## Vision Statement

Students pursuing the graduate certificate in gerontology are seeking a formalized understanding of the aging process that serves to complement an existing graduate degree such as counseling, business, public administration or social work. Students also pursue the graduate certificate in gerontology to expand their knowledge beyond the undergraduate level.

## Program Contact Information:

Dr. Karl Kosloski, Graduate Program Chair College of Public Affairs \& Community Service (CB) 210K
402-554-2964
kosloski@unomaha.edu
Program Website:
http://www.unomaha.edu/gero/master.php

## Application Deadlines:

Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Three (3) Letters of Recommendation
- Student must apply to both Graduate Studies and to the department.


## GEROGCER DEGREE INFORMATION

GEROGCER Required Courses ( 6 hours):
GERO
9110/SOC
9110

GERO 8940 Practicum
GERO 8940: May be waived in extraordinary circumstances

## GEROGCER Electives (12 hours):

Select any GERO 8000- or 9000-level course in consultation with your advisor to determine which courses meet your career goals.

## GEROGCER-Other Program-Related Information:

## Alternative Delivery

Distance courses are available for both the certificate and the MA programs.

## Dual program in Gerontology and Law

Students may pursue a certificate in gerontology and a law degree through the UNL College of Law. Students must apply to each campus to be considered.
Total Credit Hours: 18

## Sociology

## SOCIOLOGY, M.A.

## Department of Sociol ogy, College of Arts \& Sciences

## Vision Statement

This innovative degree program provides students with advanced training in sociological content, theory, and methods. The flexible and interdisciplinary nature of the program allows students to focus on an additional academic specialty area within or outside of sociology.

Department faculty members have strengths in several areas, including family and gender, global social inequality, medical sociology, anthropology, race and ethnicity, and organizational sociology. The department also has close connections to the Office of Latino/Latin American Studies, Native American Studies, Women's and Gender Studies, and the School of Public Health.

## Program Contact Information:

Dr. Daniel Hawkins, Graduate Program Chair (GPC)
Arts \& Sciences Hall (ASH) 383N
402-554-4935
dhawkins@unomaha.edu

## Program Website:

http://www.unomaha.edu/socanth/grad.php

## Application Deadlines:

- Fall: April 15
- Spring: November 15
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Three (3) Letters of Recommendation
- It is preferred that at least two of the three letters are written by recommenders who are familiar with your academic ability.
- Statement of Purpose
- Outline your educational and professional goals and describe how graduate work in sociology at UNO will help you achieve these goals. Please limit your essay to two double-spaced pages.
- Writing Sample
- Provide a paper that is representative of your academic writing ability, such as a term paper, senior thesis, or other scholarly work.
- Resume
- Please highlight the education and employment experiences that are especially relevant to graduate work in sociology.
- Applicants for admission to the graduate program in sociology should present a minimum of 15 undergraduate semester hours in the following social sciences:
- Statistics, research methods, and social theory
- A minimum of six (6) additional hours of sociology or related courses
- Deficiencies in any area can also be removed by taking a program of independent study approved by the graduate committee.
- All prerequisite courses must be passed with a grade of "B" (3.0 on a 4.0 scale) or better


## MA-SOC DEGREE REQUIREMENTS

## Students without the specific prerequisite courses may be admitted provisionally

but they must remove any deficiencies within the first year of graduate study by taking the following courses:

| SOC 2130 | Basic Statistics | 3 |
| :--- | :--- | :--- |
| SOC 2510 | Rest |  |

SOC 2510 Research Methods
SOC 4710 Development of Sociological Theory
MA-SOC Required Courses ( 12 hours):
SOC 8010 Sociological Theory I
SOC 8020 Sociological Theory II
SOC 8030 Research Methods I 3
SOC 8040 Research Methods II 3
SOC 8100 Social Inequality 3

## MA-SOC Electives (12-24 hours):

To be determined in consultation with your advisor or the graduate program chair

The department offers a rotating selection of elective courses based on faculty specialty areas. Students may also take up to one half of their elective courses outside the department, provided these courses are relevant to their interest areas within sociology.

## MA-SOC Exit Requirements:

## Thesis Option:

SOC 8990 Thesis 1 -

This option is especially recommended for students who wish to pursue the Ph.D. degree after completing their MA and who wish to gain research and writing experience through the thesis process.

## Students must complete a minimum of 24 hours of approved graduate work in sociology and related disciplines

plus six hours of thesis credit:

SOC 8990 Thesis 1 6
for a total of 30 hours.
Students will form a thesis committee that is knowledgeable about the thesis topic.

The committee will consist of at least three members, all of whom must be Graduate Faculty, and at least one of whom must be a sociologist:

An advisor from within the department
An additional member from within the department
An outside member from another academic department

Prior to beginning the thesis, students must have their project formally approved by the thesis committee. Students must pass an oral defense structured around the thesis to complete the degree requirements.

## Project Option:

SOC 8950 Practicum in Applied Sociology
SOC 8960 Practicum in Applied Sociology
The capstone experience in this program option is a research project conducted in an applied setting. Students will use the skills and knowledge they have acquired in the program to solve a problem or conduct a project for a "client" in the community (or elsewhere). Examples of potential projects include evaluating program effectiveness, assessing community needs, or designing training programs for employees.

This option is especially recommended for students who:
Plan to enter the job market (especially in a non-teaching capacity) immediately after completion of the MA degree;

Would like to gain a better idea of the type of employment for which they are qualified with an MA in sociology; or
Are already working in a setting amenable to a project of this nature.

Students may seek out their own project site or choose from among the community organizations with which the department already has relationships.

Students will form a project committee that consists of an advisor from within the department, a representative from the project site, and one other faculty member from the university with expertise or interest in the project.

Prior to beginning the project, students must have their proposal formally approved by the project committee. Students must also have their final project report approved. While the project site representative must sign off on the proposal approval form, only the two UNO faculty members will be responsible for approving the final project.

## Non-Thesis Option:

Comprehensive Examination
The comprehensive examination will focus on the student's coursework, particularly the substantive focus area. Students will answer one of two questions on sociological theory, one of two questions on research methods, and one of two questions from the focus area.

The exam is a one-week take-home exam to be scheduled by the student in consultation with the Graduate Program Chair. Students may suggest particular faculty to serve as their primary readers in each exam area, and each of the primary readers will select an additional faculty member to
evaluate the exam. Each section of the exam will be evaluated on the following basis:

1) high pass
2) pass
3) conditional pass
4) fail

In the case of a failing evaluation, students will have one opportunity per area to re-take the exam, which will consist of a new question to be evaluated by both faculty readers.

## TOTAL CREDIT HOURS:

Thesis Option: 30
Project Option: 36
Non-Thesis Option: 36

## Special Education

SPECIAL EDUCATION, M.A.

## College of Education

Vision Statement
The mission of the Special Education and Communication Disorders department is to prepare dedicated practitioners, reflective scholars, and responsible citizens who are unique in their ability to facilitate, design, implement, and evaluate programs for individuals with disabilities. This is accomplished by creating opportunities for the acquisition and maintenance of knowledge, skills, and dispositions as prescribed by the Council for Exceptional Children, the Council on Academic Accreditation in Audiology and Speech-Language Pathology (for graduate program only), and state and federal regulations.
Graduate candidates follow a course of study with accompanying practical experiences that are grounded in learned society theory, research, evidence-based practice, and experience. Our candidates develop essential interpersonal skills that make them valued members of collaborative, interdisciplinary teams in a variety of settings. Thus, each program of study is designed to promote problem-solving skills that enable candidates to continue to broaden their skills and enhance their expertise throughout their professional career. These skills facilitate the recognition and integration of professional ethics with the individual needs and values of the communities they serve.

## Program Contact Information:

Dr. Thomas Lorsbach, Graduate Program Chair (GPC) Roskens Hall (RH) 512
402-554-3345
tlorsbach@unomaha.edu

## Program Website:

http://coe.unomaha.edu/sped/special_ed_graduate.php

## Application Deadlines:

- Fall: August 1
- Spring: December 1
- Summer: May 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- 

If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required

- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- 

Two Letters of Recommendation

- Must submit the name and email of two persons who are well acquainted with the applicant's undergraduate academic work, the applicant's potential to do graduate work, and/or the applicant's professional competence
- 

Statement of Purpose

- Details: covering such topics as interest, experience and career goals
- Rule 20/21 Form
- Copy of Teaching Certificate


## MA-SPECIAL EDUCATION DEGREE REQUIREMENTS

All candidates must have completed:
SPED 4800 Social and Emotional Development 3
of Children and Youth
And
EDUC 2510 Applied Special Education

| SPED 8030 | Or |  |
| :---: | :---: | :---: |
|  | Teaching Students with | 3 |
|  | Exceptionalities |  |
| (or an equivalent to any of these). |  |  |
| MA-SPED Required Courses (21 hours): |  |  |
| SPED 8810 | Research Methods in Special | 3 |
|  | Education |  |
| SPED 8120 | High Incidence Disabilities | 3 |
| SPED 8156 | Reading and Writing Instruction for Students with Disabilities | 3 |
| SPED | Language Development and | 3 |
| 8236/SPED | Disorders for Teachers |  |
| 4230 |  |  |
| SPED | Classroom Management | 3 |
| 8816/SPED |  |  |
| 4810 |  |  |
| SPED 8910 | Assessment in Special Education | 3 |
| SPED | Professional Collaboration | 3 |
| 8980/TED |  |  |
| 8850 |  |  |
| MA-SPED Concentrations: |  |  |
| See M.A.-SPED Concentrations (p. 162) |  |  |
| MA-SPED Exit Requirements |  |  |
| SPED 8990 | Thesis | 1 |

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval and submission of the thesis.

## Graduate-Level Student Teaching/Practica

All candidates must obtain the permission of their academic advisor prior to applying for and registering for student teaching, or practicum. All candidates must complete one (or more) student teaching/practicum experience(s) as part of their preparation. At least one of these experiences must be an all-day, 16-week experience in the endorsement area. Applications will not be considered unless all materials are submitted by October 1 for Spring student teaching/practicum/externship and February 15 for all Fall student teaching/practicum.

Upon admission to the student teaching/practicum, the department will issue a permit that allows the candidate to enroll in the appropriate course. It is the candidate's responsibility to apply for the proper course. Professional seminars are required as part of the student teaching/practicum experience and attendance is mandatory.
Candidates may be removed from their placement at the request of the candidate, department, or school district/community agency.

## MA-SPED-Other Program-Related Information

Candidates seeking a Master's degree in special education must meet the criteria for admission to the Graduate College and the Department. Candidates seeking only endorsement in a special education teaching area, but who do not wish to obtain a Master's degree, must meet the admission criteria and be admitted as an unclassified student. Graduate-level hours taken as a non-degree student may be subsequently included in a program of study at the discretion of the Graduate Program Committee and the Dean of Graduate Studies. The department adheres to all restrictions on non-degree students. No student with non-degree status may enroll in a practicum or student teaching course.

Candidates completing the degree program meet the academic requirements for PK-9, K-9 or 7-12 endorsement by the Nebraska Department of Education. Candidates may seek PK-12 or K-12 endorsement by completing student teaching experiences at both the PK-9 or K-9 and 7-12 levels. One of these student teaching experiences may be completed in the candidate's classroom. The other must be completed outside the candidate's classroom.
Total Credit Hours: 42

## M.A.-SPED CONCENTRATIONS

## BEHAVIORAL DISORDERS ( 15 HOURS):

Candidates specializing in behavior disorders will be prepared to design, implement, and evaluate educational programs for children and youth with behavioral disorders. Candidates completing the degree program meet the academic requirements for PK-9, 7-12 or PK-12 endorsement by the Nebraska Department of Education. Candidates seeking PK-12 endorsement will complete student teaching experiences at both the K-9 and 7-12 levels. One of these student teaching experiences may be completed in the candidate's classroom. The other must be completed outside the candidate's classroom.

In addition to previously specified prerequisites, candidates specializing in behavior disorders must complete the following requirements.

## Behavioral Disorders Required Courses

SPED 8820 Behavioral Disorders 3
SPED 8656 Transition Planning 3
SPED 8830 Practicum In Behavioral Disorders 3
SPED 8850 Methods and Materials in Behavioral 3 Disorders
SPED 8860 Behavior Modification 3
SPED 883: (PK-9 or 7-12)
Candidates without a teaching certificate wishing to complete a concentration in Behavior Disorders must complete 33 credit hours (SPED 8830 Practicum in

Behavior Disorders is not required). If SPED 8830 is not required an additional course in consultation with your advisor and or graduate program chair will be determined.
MILD/MODERATE DISABILITIES (15 HOURS):
Candidates specializing in teaching students with mild/moderate disabilities can obtain K-9, 7-12, or K-12 endorsement. Upon completion of the program, candidates will meet the requirements of the Nebraska Department of Education for endorsement to teach children and youth with mild/moderate disabilities. Candidates seeking K-12 endorsement will complete student teaching experiences at both the K-9 and 7-12 levels. One of these student teaching experiences may be completed in the candidate's classroom. The other must be completed outside the candidate's classroom.

Candidates currently holding a mild/moderate disabilities endorsement can obtain a Master of Arts degree in special education with a concentration in Mild/Moderate Disabilities. If the candidate has completed comparable coursework at the undergraduate level, course substitutions will be made in consultation with the department adviser.

In addition to the previously specified prerequisites, candidates specializing in teaching students with mild/moderate disabilities must complete the following requirements:
Mild/Moderate Disabilities Required Courses

| SPED 8646 | Methods and Materials in Special | 3 |
| :--- | :--- | :--- |
|  | Education | 3 |
| SPED 8656 | Transition Planning | 3 |
| SPED 8720 | Basic Student Teaching | 3 |
| SPED 8960 | Advanced Diagnosis of Learning |  |
|  | Deficits | 3 |

SPED 8720: (K-9, 7-12)

## SPECIAL EDUCATION, M.S.

## Department of Special Education, College of Education Vision Statement

The mission of the Special Education and Communication Disorders department is to prepare dedicated practitioners, reflective scholars, and responsible citizens who are unique in their ability to facilitate, design, implement, and evaluate programs for individuals with disabilities. This is accomplished by creating opportunities for the acquisition and maintenance of knowledge, skills, and dispositions as prescribed by the Council for Exceptional Children, the Council on Academic Accreditation in Audiology and Speech-Language Pathology (for graduate program only), and state and federal regulations.

Graduate candidates follow a course of study with accompanying practical experiences that are grounded in
learned society theory, research, evidence-based practice, and experience. Our candidates develop essential interpersonal skills that make them valued members of collaborative, interdisciplinary teams in a variety of settings. Thus, each program of study is designed to promote problem-solving skills that enable candidates to continue to broaden their skills and enhance their expertise throughout their professional career. These skills facilitate the recognition and integration of professional ethics with the individual needs and values of the communities they serve.

## Program Contact Information:

Dr. Thomas Lorsbach, Graduate Program Chair (GPC)
Roskens Hall (RH) 512
402-554-3345
tlorsbach@unomaha.edu

## Program Website:

http://coe.unomaha.edu/sped/special_ed_graduate.php

## Application Deadlines:

- Fall: August 1
- Spring: December 1
- Summer: May 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Two Letters of Recommendation
- Must submit the name and email of two persons who know well the applicant's undergraduate academic work, the applicant's potential to do graduate work, and/or the applicant's professional competence
- Statement of Purpose
- Details: covering such topics as interest, experience and career goals
- Rule 20/21 Form
- Copy of Teaching Certificate
- All candidates must have completed SPED 4800/8806 Emotional Development of Children and Youth and EDUC 2510 Applied Special Education or SPED 8030 Teaching Students with Exceptionalities (or an equivalent to any of these).


## MS-SPED DEGREE REQUIREMENTS

| All candidates must have completed: |  |  |
| :---: | :---: | :---: |
| SPED 4800 | Social and Emotional Development of Children and Youth And | 3 |
| EDUC 2510 | Applied Special Education | 3 |
|  | Or |  |
| SPED 8030 | Teaching Students with | 3 |
|  | Exceptionalities |  |
| (or an equivalent to any of these). |  |  |
| MS-SPED Required Courses (21 hours): |  |  |
| SPED 8810 | Research Methods in Special | 3 |
|  | Education |  |
| SPED 8120 | High Incidence Disabilities | 3 |
| SPED 8156 | Reading and Writing Instruction for Students with Disabilities | 3 |
| SPED | Language Development and | 3 |
| 8236/SPED | Disorders for Teachers |  |
| 4230 |  |  |
| SPED | Classroom Management | 3 |
| 8816/SPED |  |  |
| 4810 |  |  |
| SPED 8910 | Assessment in Special Education | 3 |
| SPED | Professional Collaboration | 3 |
| 8980/TED |  |  |
| 8850 |  |  |

Subtotal: 21

## MS-SPED Concentrations

See M.S.-SPED Concentrations (p. 164)

## MS-SPED Exit Requirements:

Comprehensive Examination
Graduate-Level Student Teaching/Practica
All candidates must obtain the permission of their academic advisor prior to applying for and registering for student teaching, or practicum. All candidates must complete one (or more) student teaching/practicum experience(s) as part of their preparation. At least one of these experiences must be an all-day, 16 week experience in the endorsement area. Applications will not be considered unless all materials are submitted by October 1
for Spring student teaching/practicum/externship and February 15 for all Fall student teaching/practicum.

Upon admission to the student teaching/practicum, the department will issue a permit that allows the candidate to enroll in the appropriate course. It is the candidate's responsibility to apply for the proper course. Professional seminars are required as part of the student teaching/practicum experience and attendance is mandatory.

Candidates may be removed from their placement at the request of the candidate, department, or school district/community agency.

## MS-SPED-Other Program-Related Information:

Candidates seeking a Master's degree in special education must meet the criteria for admission to the Graduate College and the Department. Candidates seeking only endorsement in a special education teaching area, but who do not wish to obtain a Master's degree, must meet the admission criteria and be admitted as an unclassified student. Graduate-level hours taken as a non-degree student may be subsequently included in a program of study at the discretion of the Graduate Program Committee and the Dean of Graduate Studies. The department adheres to all restrictions on non-degree students. No student with non-degree status may enroll in a practicum or student teaching course.

Candidates completing the degree program meet the academic requirements for PK-9, K-9 or 7-12 endorsement by the Nebraska Department of Education. Candidates may seek PK-12 or K-12 endorsement by completing student teaching experiences at both the PK-9 or K-9 and 7-12 levels. One of these student teaching experiences may be completed in the candidate's classroom. The other must be completed outside the candidate's classroom.
Total Credit Hours: 36

## M.S.-SPED CONCENTRATIONS

## BEHAVIORAL DISORDERS ( 15 HOURS):

Candidates specializing in behavior disorders will be prepared to design, implement, and evaluate educational programs for children and youth with behavioral disorders. Candidates completing the degree program meet the academic requirements for PK-9, 7-12 or PK-12 endorsement by the Nebraska Department of Education. Candidates seeking PK-12 endorsement will complete student teaching experiences at both the K-9 and 7-12 levels. One of these student teaching experiences may be completed in the candidate's classroom. The other must be completed outside the candidate's classroom.

In addition to previously specified prerequisites, candidates specializing in behavior disorders must complete the following requirements.

## Behavioral Disorders Required Courses <br> SPED $8820 \quad$ Behavioral Disorders 3 <br> SPED 8656 Transition Planning 3 <br> SPED 8830 Practicum In Behavioral Disorders 3 <br> SPED 8850 Methods and Materials in Behavioral Disorders <br> SPED 8860 Behavior Modification

SPED 8830: (PK-9 or 7-12)
Candidates without a teaching certificate wishing to complete a concentration in Behavior Disorders must complete 33 credit hours (SPED 8830 Practicum in Behavior Disorders is not required). If SPED 8830 is not required an additional course in consultation with your advisor and or graduate program chair will be determined.

## MILD/MODERATE DISABILITIES (15 HOURS):

Candidates specializing in teaching students with mild/moderate disabilities can obtain K-9, 7-12, or K-12 endorsement. Upon completion of the program, candidates will meet the requirements of the Nebraska Department of Education for endorsement to teach children and youth with mild/moderate disabilities. Candidates seeking K-12 endorsement will complete student teaching experiences at both the K-9 and 7-12 levels. One of these student teaching experiences may be completed in the candidate's classroom. The other must be completed outside the candidate's classroom.

Candidates currently holding a mild/moderate disabilities endorsement can obtain a Master of Arts degree in special education with a concentration in Mild/Moderate Disabilities. If the candidate has completed comparable coursework at the undergraduate level, course substitutions will be made in consultation with the department adviser.
In addition to the previously specified prerequisites, candidates specializing in teaching students with mild/moderate disabilities must complete the following requirements:
Mild/Moderate Disabilities Required Courses SPED 8646 Methods and Materials in Special

Education
SPED 8656 Transition Planning
SPED 8720 Basic Student Teaching 3
SPED 8960 Advanced Diagnosis of Learning Deficits
SPED 8970 Instructional Strategies

Speech-Language Pathology
SPEECH-LANGUAGE PATHOLOGY, M.S.

## Department of Special Education, College of Education Vision Statement

The mission of the Special Education and Communication Disorders department is to prepare dedicated practitioners, reflective scholars, and responsible citizens who are unique in their ability to facilitate, design, implement, and evaluate programs for individuals with disabilities. This is accomplished by creating opportunities for the acquisition and maintenance of knowledge, skills, and dispositions as prescribed by the Council for Exceptional Children, the Council on Academic Accreditation in Audiology and Speech-Language Pathology, and state and federal regulations.

## Program Contact Information:

Dr. Thomas Lorsbach, Graduate Program Chair (GPC) Roskens Hall (RH) 512
402-554-3345
tlorsbach@unomaha.edu

## Program Website:

http://coe.unomaha.edu/sped/

## Application Deadlines:

- Fall: February 1
- Spring: September 1
- Summer: N/A


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 550 for the written TOEFL
- 213 for the computer-based TOEFL
- 61 for the internet-based TOEFL
- If scores are more than two years old you may be required to retake the TOEFL, IELTS, or PTE exam.
- Entrance Exam
- GRE
- Two Letters of Recommendation
- Must submit the name and email of two persons who are well acquainted with the applicant's undergraduate academic work, the applicant's potential to do graduate work, and / or the applicant's professional competence
- Statement of Purpose
- Covering such topics as interest, experience, and career goals.
- Rule 20/21 Form
- The following are considered to be essential skills and/or abilities for speech-language pathology candidates: adequate vision, hearing, speech, and language (spoken or written). Candidates must complete a speech-language-hearing screen within the first semester of enrollment.
- The Pre-Professional Skills Test (PPST) must be passed the first semester of enrollment or the student will be prohibited from registering for classes. The candidate should consult with his or her advisor upon admission into the program to determine the first available time to sit for the PPST. It should be noted that candidates holding an active teaching certificate in elementary education, secondary education, or special education may have this requirement waived.


## MS-SPTH DEGREE REQUIREMENTS

## Early admission to Speech-Language Pathology program:

Candidates with a previous Bachelor's degree in a discipline other than speech-language pathology may apply for early admission to the Speech-Language Pathology program. Candidates will take graduate courses while completing the undergraduate deficiencies, thereby expediting the completion of their professional preparation.
SPED 1400 Introduction to Communication 3 Disorders
SPED 3200 Writing for the Profession of Speech-Language Pathology

SPED 4330 Aural Rehabilitation 3
SPED 4370 Basic Audiology 3
SPED 4380 Anatomy and Physiology 3
SPED 4390 Hearing Science 3
SPED 4420 Early Language Development in 3 Children
SPED 4430 Articulation and Phonological 3
Disorders
SPED 4450 Phonetics
SPED 4460 Later Language Development in 3

SPED 1400 (except Early Admit candidates)
SPED 3200 (except for Early Admit candidates)
SPED 4750 (except Early Admit candidates)

## A natural science course

Prefer:
BIOL 1020 Principles of Biology
A physical science course
Prefer one of the following:
CHEM 1140 Fundamentals of College Chemistry 4
PHYS 1110 General Physics I with Algebra 4
PHYS 1050 Introduction to Physics 4
MS-SPTH Required Courses ( $\mathbf{3 9}$ hours):
TED 8010 Introduction to Research 3
SPED 8240 Language Disorders in School-Age 3
SPED 8410 Motor Speech Disorders 3
SPED 8420 Voice Disorders 3
SPED 8430 Fluency Disorders 3
SPED 8440 Aphasia \& Related Language 3
SPED 8460 Diagnostic Practicum in 1
Communication Disorders
SPED 8500 Basic Clinical Practicum in Speech- 1
Language Pathology
SPED 8510 Educational Externship in 3
Communication Disorders
SPED 8520 Medical Externship in Communication Disorders
SPED 8540 Autism Spectrum Disorders 2
SPED 8560 Augmentative \& Alternative 2
Communication
SPED 8570 Dysphagia
SPED 8590 Language Disorders: Birth to Five 3

SPED 8460 (register twice)
SPED 8500 (register three times)
SPED 8510 (Schools) (3)*
SPED 8520 (Hospitals; Rehabilitation Centers)
SPED 8510, SPED 8520: Placements for this practicum are made as space permits.

## MS-SPTH Electives (3 hours):

The 3 hours of elective credit will be waived if the thesis option is chosen.

## SPED <br> 8980/TED

Professional Collaboration
8850
SPED Special Needs Students from
8556/SPED Diverse Communities
4550
SPED 8970 Instructional Strategies 3
SPED 8820
Behavioral Disorders
Mental Health and Aging
8476/GERO
4470/PSYC
4470/PSYC
8476
GERO Legal Aspects of Aging
8506/GERO
4500
GERO Programs and Services for the
8676/GERO Elderly
4670
GERO 8696 Working with Minority Elderly
MS-SPTH Exit Requirements:
SPED 8990 Thesis

## OR Comprehensive Examination

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and final approval and submission of the thesis.
If the candidate takes the comprehensive examination, the candidate must pass the written comprehensive examination selected by the faculty.

## TOTAL CREDIT HOURS:

Thesis Option: 45
Non-Thesis Option: 42

## MS-SPED-Other Program-Related Information:

## Remediation Statement

Every course assignment in the Speech-Language Pathology program's classes is connected to a Knowledge and Skills Acquisition (KASA) competency. KASA
competencies found in each syllabus (Section 3.1: Course Objectives) must be successfully met for the course to count toward certification by the American Speech-Language-Hearing Association (ASHA). Please refer to ASHA's website for more information on KASA (http://www.asha.org/certification/slp_standards.htm). Remediation is required for any grade below a ' $B$ ' on any class requirement. Students will be required to meet with the instructor to remediate any grade below 'B.' Individual arrangements will be made, in writing, for remediation. The first score given by the instructor may be retained for course grading while the remediation assignment will be used to pass the KASA competencies. If a student's overall grade for the course is a ' B -' or lower, remediation assignments MUST have been completed to the satisfaction of the instructor or the student must retake the class. If the student does successfully complete the remediation, the course grade of ' $B$-' or lower will be counted towards the student's graduation, provided the student is still meeting the program's overall Quality of Work standards.
If a student requires more than 2 remediation assignments across all courses in a given semester, a Conference Record Form will be completed by the student and the faculty members involved. Need for a third remediation in one semester will result in the student being placed on academic probation, the terms of which will be decided by coordination between the Communication Disorders faculty and the Office of Graduate Studies. The student then will be notified of the academic probation by letter from the Office of Graduate Studies.

## Academic Integrity and Plagiarism

Academic integrity is expected for all interactions and requirements. This includes, but is not limited to: original work on exams, accountability and completion of requirements, maintenance of confidentiality for individuals and class discussions when appropriate, and accurate citation for original work. Plagiarism will result in an automatic failing grade for the assignment. Please refer to the UNO Academic Integrity Policy for more specific descriptions of academic integrity violations and to the American Speech-Language-Hearing Association Code of Ethics Principle IV.

## Theatre

THEATRE, M.A.
Department of Theatre, College of Performing Arts Vision Statement
To ignite in the student, teacher and community a capacity for critical thinking, compassionate feeling, collaborative vision, and ability to delight.
"The true purpose of theatre is to create myths, to express life in its immense, universal aspect, and from that, to extract images in which we find pleasure in discovering ourselves."-Antonin Artaud

The overall goal of the program is to help our students develop a deeper understanding of their roles as theatre artists by studying and applying theory and criticism, history, and literature to their work as actors, directors, designers, dramaturges, or scholars. We emphasize the interaction between scholarship and production. All of our students work in multiple disciplines in preparation for Ph.D. work or careers in professional, academic, or community theatres.

## Program Contact Information:

Dr. Cindy Phaneuf, Graduate Program Chair
Weber Fine Arts Building (WFAB) 323
402-554-2552
cphaneuf@unomaha.edu

## Program Website:

http://www.unomaha.edu/unotheatre/index.php

## Application Deadlines:

- Fall: February 22
- Spring: October 1
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Minimum of 15 undergraduate semester hours with a "B" ( 3.0 on a 4.0 scale) average in appropriate courses or experience equivalent to undergraduate training in theatre.
- Two (2) Letters of Recommendation
- Letters should address your potential for scholarly and artistic achievement at the graduate level.
- Statement of Purpose
- Not to exceed three double-spaced typewritten pages explaining why you wish to pursue a Master of Arts in Theatre. The statement of purpose should also address your interest in an area of concentration. These statements are reviewed for quality of writing and the extent to which your goals are compatible with the strengths and interests of the theatre faculty and the stated objectives of the program.
- Writing Sample
- Sample can be from any academic discipline and should show the candidate's ability to conceptualize and write at a graduate level.


## MA-THEA DEGREE REQUIREMENTS

| MA-THEA Required Courses (3 hours): |  |  |
| :--- | :--- | :--- |
| THEA 8900 | Theatre Research Methods | 2 |
| THEA 8910 | Research Methods II | 1 |
| MA-THEA Required Seminar Courses (9 hours): |  |  |
| Select 3 of the following: |  |  |
| THEA 8920 | Dramatic Theory \& Criticism: <br> Ancient Greeks to 1850 | 3 |
| THEA 8930 | Theatre in Our Community: Theory <br> \& Criticism <br> Modern Theatre Aesthics: Realism <br> \& Naturalism to 1980 | 3 |
| THEA 8940 | 3 |  |
| THEA 8950 | OR <br> Contemporary Theatre Aesthetics: <br> $1980-P r e s e n t ~ a n d ~ B e y o n d ~$ | 3 |

## MA-Theatre Electives (3-12 hours):

If a concentration is established, nine (9) hours will be fulfilled within the courses required for the specific area of concentration and three ( 3 ) hours will be filled by electives. If no concentration is established, then twelve (12) hours of electives are required.

Hours depend on which option is chosen.
MA-Theatre Concentrations (9 hours):
See M.A.-Theatre Concentrations (p. 169)
MA-THEA Exit Requirements:
Thesis Option
THEA 8990 Thesis 1 -
Comprehensive Examination
Thesis: Successful completion of at least 24 semester hours of course work, including at least 12 hours in 8000-level courses; plus a thesis (six [6] credit hours) based on a
proposal approved by the student's supervisory committee and defended orally before the committee when completed.

All candidates should carefully review the Graduate College requirements for forming the Supervisory Committee, Thesis/Thesis Equivalent Proposal Approval Forms and the final approval and submission of the thesis.

## Thesis Equivalent Project option

THEA 8980 Final Project
Comprehensive Examination
Thesis: Successful completion of at least 30 semester hours of course work including at least 12 hours in 8000 -level courses; plus a Final Project (six [6] credit hours) consisting of major responsibility in a production approved by the theatre faculty and the Graduate Program Committee in Theatre or an equivalent major effort in, for example, playwriting or a project of sufficient challenge and depth which is approved by the Theatre Graduate Program Committee. A final paper, portfolio, script or equivalent documentation will be assembled upon completion of the project and presented to the student's supervisory committee. The student will make an oral defense of the project before the committee.

## Project Option

THEA 8980 Final Project 1 -

## Comprehensive Examination

Final Project: Successful completion of at least 33 semester hours of course work, including at least 15 hours in 8000-level courses; plus a Final Project (three [3] credit hours) consisting of major responsibility in a production approved by the theatre faculty and the Graduate Program Committee in theatre or an equivalent major effort in, for example, playwriting or a project of sufficient challenge and depth which is approved by the theatre Graduate Program Committee. A final prompt book, journal, portfolio, script or equivalent documentation will be assembled upon completion of the project and presented to the student's committee. The student will make an oral defense of the project before the theatre graduate program committee.

TOTAL CREDIT HOURS:
Thesis Option: 30
Thesis Equivalent or Final Project Option: 36 Final Project Option: 36

## M.A.-THEATRE CONCENTRATIONS

## (9 hours):

Any of the courses below can serve as Electives.

## ACTING CONCENTRATION

| Requirements |  |  |
| :--- | :--- | ---: |
| THEA |  |  |
| 8346/THEA | Advanced Acting: Auditioning |  |
| 4340 |  |  |
| THEA | Advanced Acting: Ensemble Play | 3 |
| 8336/THEA | Production |  |
| 4330 |  |  |
| THEA | Advanced Acting: Postrealism | 3 |
| 8316/THEA |  |  |
| 4310 |  | 3 |
| THEA | Advanced Acting: Greeks to |  |
| 8326/THEA | Restoration |  |
| 4320 |  | 3 |
| DIRECTING CONCENTRATION |  |  |
| Requirements |  |  |
| THEA | Directing I | 3 |
| 8436/THEA |  |  |
| 4430 |  |  |
| THEA | Directing II |  |
| 8444/THEA |  | 3 |
| 4440 |  |  |
| THEA | Advanced Projects in Theatre |  |
| 8016/THEA |  |  |
| 4010 |  |  |
| THEA | Advanced Projects in Theatre |  |
| 8026/THEA |  |  |
| 4020 |  |  |
| DESIGN AND TECHNOLOGY |  |  |
| CONCENTRATION |  |  |

## Requirements

THEA Rendering and Scene Painting
3610
THEA
Scene Design
8616/THEA
4610
THEA
8665/THEA
3660
THEA
8506/THEA
4500
THEA
8516/THEA
4510
THEA 8650
THEA
8556/THEA
4550

## THEATRE HISTORY AND DRAMATIC LITERATURE CONCENTRATION

## Requirements

THEA 8786
Classical to 1500
THEA 8796 Renaissance to 18503
THEA 8766 Modern to 19803
THEA 8756 Theatre and Social Justice 3
THEA Seminar in Theatre History
8736/THEA
4730
THEA Seminar in Dramatic Literature 3
8836/THEA
4830
THEATRE MANAGEMENT

| Requirements |  |  |
| :--- | :--- | ---: |
| PA 8550 | Introduction to the Non-Profit Sector | 3 |
| PA 8580 | Management and Administration of <br> Non Profit Organizations | 3 |
| PA 8520 | Seminar in Grant Writing | 3 |
| PA | Seminar in Public Financial | 3 |
| 8480/AVN | Administration |  |
| 8480 |  |  |
| PA 8710 | Fund Raising in Public and Non- | 3 |
| PA 8596 | Profit Organizations <br> Techniques Topics in NonProfit <br> Management | $1-$ |
|  | Man |  |

## Urban Studies

## URBAN STUDIES, M.S.

## School of Public Administration, College of Public Affairs \& Community Service

## Vision Statement

The modern world is increasingly an urban world. Urban Studies seeks to understand the physical, social, economic, demographic, political, and environmental implications of urbanization and urbanism.
The MS in Urban Studies is an interdisciplinary degree program offered through the School of Public
Administration. As UNO is a comprehensive, metropolitan university, the MS in Urban Studies helps fulfill the urban mission of UNO.

## Program Contact Information:

Dr. Robert Blair, Graduate Program Chair (GPC) College of Public Affairs \& Community Service (CB)
111C
402-554-3865
rblair@unomaha.edu
Meagan VanGelder, Coordinator
College of Public Affairs \& Community Service (CB) 111

402-554-3480
mvangelder@unomaha.edu

## Program Website:

http://www.urbanstudies.unomaha.edu/

## Application Deadlines:

Applications for this program are accepted on a rolling basis for the fall and spring semesters only. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- The general prerequisite for admission to the Urban Studies program is a four-year bachelors' degree with a minimum grade point average of 3.0 in the junior and senior years combined (last 50-60 credit hours). Under extenuating circumstances an average below 3.0 will be considered.
- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the US, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland, or New Zealand are required to submit TOEFL and GRE scores.
- The minimum TOEFL requirement is 550 (written) or 213 (computer-based), or an IELTS with a score of 6.5 or better, or a PTE with a score of 59 or better.
- Two (2) Letters of Recommendation
- Statement of Purpose
- A two-page typed essay on how the Master of Science in Urban Studies will further the
applicant's career objectives must be included with the application for admission
- Resume


## MS-UBNS DEGREE REQUIREMENTS

| MS-UBNS Required Courses (22 hours): |  |  |
| :--- | :--- | :--- |
| UBNS | Seminar in Urban Studies | 3 |
| 8000/GEOG |  |  |
| 8830 |  |  |
| PA | Research Methods for Public |  |
| 8120/AVN | Administration |  |
| 8120 |  | 3 |
| PA 8010 | The Public Economy |  |
| UBNS | Race, Ethnicity and American Urban | 3 |
| 8020/BLST | Culture |  |
| 8020 |  | 4 |
| GEOG | Geographic Information Systems I | 4 |
| 8056/GEOG |  |  |
| 4050 |  | 3 |
| UBNS 8060 | Introduction to Urban Planning | 3 |
| UBNS 8200 | Community Organizing and |  |
|  | Development |  |

## MS-UBNS Electives (12 hours):

Students select four (4) elective courses from those listed below. In particular circumstances, other electives may be accepted by the Director of Urban Studies. Many electives include course prerequisites; Urban Studies courses or undergraduate preparation may fulfill those requirements, as determined by the Director of Urban Studies. Electives are intended to give students knowledge and skills that prepare them to manage projects and organizations. Electives currently offered online and approved for Urban Studies students are:

| PA 8050 | Public Administration and <br> Democracy | 3 |
| :--- | :--- | :--- |
| PA 8090 | Organization Theory and Behavior <br> Managing Information in the Public | 3 |
| PA10 | Mector |  |
| PA 8300 | Policy Design and Implementation | 3 |
| PA 8320 | Public Policy Evaluation | 3 |
| PA 8400 | Public Budgeting | 3 |
| PA 8410 | Public Human Resource <br> Management | 3 |
| PA 8436 | Municipal Administration <br> PA 8470 | Administrative Ethics and |
| PA | Leadership | 3 |
| 8480/AVN | Seminar in Public Financial | 3 |
| Administration | 3 |  |
| PA 8530 | Strategic Planning \& Mgmt in | 3 |
| PA 8550 | Public \& Non-Profit Organiz. |  |
| Introduction to the Non-Profit Sector | 3 |  |

## MS-UBNS Exit Requirements:

Non-Thesis Option:

| PA 8990/PA | Capstone Project in Public |
| :--- | :--- |
| 4990 | Administration |

## Internship

Students who have not had at least two years full-time professional experience in the public or nonprofit sector (experience must have been in the sector of the student's primary future career interest) will complete an internship. The internship is given as a supervised course of three credit hours in addition to the 37 hours required in the Urban Studies program. The internship is taken following completion of preparatory coursework as determined by the Director of the Urban Studies program.

## TOTAL CREDIT HOURS:

Non-Thesis Option: 37
Thesis Option: 40

## Writing

WRITING, M.F.A.

## Writer's Workshop Department, College of Communication, Fine Arts \& Media <br> Vision Statement

The MFA in Writing is a two-year program of focused instruction for creative writers who are committed to a literary career. The program comprises four 16-week writing seminars and five 10-day, conference-style residency sessions. The seminars and residencies are integrated to help those who need to hone their writing and critical thinking in order to participate competitively in the wider domain of contemporary American letters. In a twoyear course of study, the student earns 60 credit hours toward a Masters of Fine Arts degree in one of four genres: fiction, poetry, playwriting, or nonfiction.

## Program Contact Information:

Dr. Art Homer, Graduate Program Chair (GPC)
Weber Fine Arts Building (WFAB) 221
402-554-2771
ahomer@unomaha.edu
Ms. Jenna Lucas, Administrative Director
Weber Fine Arts Building (WFAB) 212
402-554-3020
jlucas@unomaha.edu
Program Website:
http://www.unomaha.edu/unmfaw/

## Application Deadlines:

- Fall: March 15
- Spring: August 15
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Three (3) Letters of Recommendation
- From persons who can attest to your ability to complete a course of graduate study, the ability to work independently, and/or the quality of your prior literary achievements
- Statement of Purpose
- A one- to two-page single-spaced self-assessment of your background in writing, reasons for wanting to enter the MFA program, and your goals as a writer.
- For fiction, creative nonfiction, and poetry, include any other experience you have in the wider community of literature; e.g., organizing or participating in craft workshops, attending conferences, working for literary magazines, etc.
- For playwriting, include any specific experience as it pertains to full-length plays, one-act plays, and ten-minute plays, plus any experience in other areas of theatre.
- Writing Sample
- A manuscript representing your best work in the genre track (fiction, creative nonfiction, playwriting, or poetry) for which you are applying
- 30-40 pages of fiction or nonfiction
- 15-20 pages of original playwriting
- 15 pages of poetry

NOTE: Your self-assessment statement and your manuscript sample must be submitted in your online application in .pdf format. If you are unable to submit these materials in .pdf format or have questions regarding the content of your submissions, please contact Jenna Lucas Finn at 402-554-3020. Fiction, creative nonfiction, and poetry manuscript format should be in 12-point typeface with 1 " margins; poetry may be single-spaced; prose should be double-spaced, pages numbered in the top right corner with the applicant's last name on the top left of each page. Playwriting submissions should follow standard Playwriting format. Material in genres other than the one in which you are applying will not be read. For specific information, requirements, and current residency dates for the program, please consult the program website: http://www.unomaha.edu/unmfaw.

## MFA-WRTG DEGREE REQUIREMENTS

MFA-WRTG Required Residency Session:
MFAW Residency Session
8700
Register for one 3-hour session per semester (4 semesters)
Residencies are conference-style sessions (10 days) consisting of a combination of workshops on student writing, craft and theory classes, individual conferences with mentoring faculty, and performance readings.

All students are required to take a minimum of 20 hours of a combination of these events, and to meet with their mentoring faculty member to design a course of study for the semester.

## MFA-WRTG Writing Options (choose one):

## Seminars

Seminars are semester-long (16 weeks) supervised distance studies in writing, during which the student corresponds regularly with a faculty mentor on the work which was proposed during the preceding residency session individual conferences. At least four times a semester, the student must submit creative and critical writing to the faculty mentor. The mentor will respond with revisions, suggestions for further readings, and discussion. Seminars are composed of a maximum of 5 students each. Students must register for one 12 -hour seminar session per semester for four semesters.

## Fiction:

MFAW Fiction Seminar 12
8830
Non-Fiction:
MFAW Nonfiction Seminar

| Playwriting: |  |  |
| :--- | :--- | ---: |
| MFAW | Playwriting Seminar | 12 |
| 8850 |  |  |
| Poetry: |  | 12 |
| MFAW | Poetry Seminar |  |
| 8860 |  |  |
| MFA-WRTG Exit Requirements: |  |  |
| MFAW $\quad$ Graduating Residency Session |  |  |
| 8710 |  |  |
| MFA-WRTG-Other Program-Related |  |  |
| Information: |  |  |

- The MFA in Writing at the University of Nebraska is "low-residency"-there are no campus-based courses.
- Upon acceptance, a $\$ 500$ non-refundable deposit is required to hold the student's place in the program. This deposit is applied toward the first Residency Meals and Lodging Fee.
Total Credit Hours: 60


## M.B.A./M.I.S.

## Department of Business Administration, College of Business Administration

Department of Information Systems \& Quantitative Analysis, College of Information Science \& Technology
Vision Statement
In today's context of globally integrated and interdependent businesses, ubiquitous information technologies, and a mobile workforce, it is critical that graduate education provides students opportunities to develop integrated business and technology skills. The primary purpose of this dual degree program is to provide this integration by enabling students to complete the MBA and MS in MIS degrees simultaneously. This track is designed for dedicated students who are willing to take on the challenges related to graduate education from two perspectives-Business Administration and Management Information Systems. As such, this program involves intensive preparation in both business administration and information systems and a specialization in an area that combines both backgrounds. The dual degree program requires 57 hours of course work beyond foundation requirements. Students who wish to pursue this option must work closely with an adviser to develop an integrated plan of study at an early stage.

## Program Contact Information

(Business Administration):
Dr. Donald Baum, Graduate Program Chair (GPC)

Mammel Hall (MH) 332D
6708 Pine Street
402-554-2538
dbaum@unomaha.edu
Ms. Lex Kaczmarek, Director
Mammel Hall (MH) 300
6708 Pine Street
402-554-2303
lkaczmarek@unomaha.edu

## (Management Information Systems):

Dr. Peter Wolcott, Graduate Program Chair (GPC) Peter Kiewit Institute (PKI) 177E
402-554-3158
pwolcott@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu

## Program Website:

http://www.isqa.unomaha.edu/gmba-mis.htm

## Application Deadlines:

- Fall: July 1
- Spring: November 1
- Summer: April 1


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- All applicants must have earned a minimum Junior/Senior GPA of 2.85
- International applicants who do not have a baccalaureate or equivalent degree from an English-
speaking institution of higher education in the United States, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL scores. The minimum TOEFL score required for the joint MBA/MS in MIS program is 550 for the paper-based TOEFL, or 213 for the computerbased test, or 79 for the internet-based test; or a 6.5 on the IELTS.
- Entrance Exam
- Official GMAT score: minimum GMAT score of 500 with a minimum 20th percentile for both the verbal and quantitative portions; or 293 on the GRE (minimum 20th percentile for both the verbal and quantitative portions)
- Three (3) Letters of Recommendation
- From individuals who can evaluate your work and/or academic achievement
- Writing Sample
- From work or previous academic experiences
- If you do not have a writing sample, please submit a two-page double-spaced word-processed essay that addresses the following two topics:
- Discussion of two accomplishments that demonstrate your potential for success in the dual-degree MBA/MIS program
- Discussion of your unique personal qualities and life experiences that distinguish you from other applicants to the dual-degree MBA/MIS program
- Resume
- Include work experience and background
- Interview: optional
- Although not required, applicants are strongly encouraged to arrange for an interview with one or more members of the Graduate Program Committees of the MBA and MIS programs by directly contacting the Committee Chairperson of the College of IS\&T. Telephone interviews are highly recommended for applicants outside the local area.
- Students qualifying for admission based on the standard outlined above, but lacking some founding courses, will be granted provisional status until all foundation courses are completed with grades of "B" ( 3.0 on a 4.0 scale) or better.


## MBA-MIS DEGREE REQUIREMENTS

## MBA Foundation Courses:

Accounting:
BSAD 8110 Accounting and Financial Fundamentals
or one year of Principles of Accounting at the undergraduate level:
ACCT 2010 Principles of Accounting I 3
ACCT 2020 Principles of Accounting II 3
Economics:
BSAD 8180 Analytical Foundations of 3 Economics
or Micro- and Macro-Economics at the undergraduate level:
ECON 2200 Principles of Economics (Micro) 3
ECON 2220 Principles of Economics (Macro) 3
College Algebra:
MATH 1310 Intermediate Algebra 3
MATH 1320 College Algebra
or their equivalents

## English Composition:

A required course for all international students entering the MBA program who are required to take the TOEFL:
ENGL 1150 English Composition I
MS in MIS Foundation Courses:
Six (6) hours of programming coursework or equivalent experience
CIST 1400 Introduction to Computer
Programming
CSCI 1620 Introduction to Computer Science II
or equivalent
Select one:
CIST 2100
Organizations, Applications and Technology
Or
one semester of undergraduate
information systems
or equivalent
Select one:
ISQA 8040
An Overview of Systems
Development
or
ISQA 4110 Information Systems Analysis
And
ISQA 4120 System Design and Implementation
or equivalent
Select one:
ISQA 8050
Data Organization and Storage


## MBA-MIS Electives: 9 hours from one of the areas of focus listed below

Students must take a minimum of 3 credit hours of the ISQA 8000-level elective courses and a minimum of 3 credit hours of the BSAD or ECON 8000-level elective courses

Students may enroll in a maximum of 6 credit hours of dual-level (8-6) elective courses

Students may pursue an alternate area of focus with the approval of the Graduate Program Committee

| Technology | Entrepreneurship Focus: |  |
| :--- | :--- | ---: |
| BSAD | Special Topics in Economics | $1-$ |
| 8916/ECON |  |  |
| 8916/ECON |  |  |
| 4910 |  | 3 |
| BSAD 8620 | Valuation of Intellectual Property | 3 |
| ECON | Economics of Technology |  |
| 8346/ECON |  |  |
| 4340 |  |  |
| ECON | Economics of Entrepreneurship | 3 |
| 8736/ECON |  | 3 |
| 4730/BSAD |  | 3 |
| 8736 |  |  |
| ISQA 8180 | Electronic Commerce |  |
| ISQA 8570 | Information Security Policy and | 3 |
|  | Ethics |  |
| Business Process Transformation Focus: |  |  |
| ECON | Economics of Technology |  |
| 8346/ECON |  | 3 |
| 4340 |  | 3 |
| ISQA 8196 | Process Reengineering with |  |
|  | Information Technology |  |
| ISQA 8736 | Decision Support Systems | 3 |
| ISQA 8570 | Information Security Policy and | 3 |
| ISQA 8810 | Ethics | Information Technology Project |


| Applied Quantitative Techniques Focus: |  |  |
| :--- | :--- | :--- |
| BSAD | Business Forecasting | 3 |
| 8080/ECON |  |  |
| 8310 |  |  |
| ISQA | Advanced Statistical Methods for | 3 |
| 8156/ISQA | IS\&T |  |
| 4150 |  | 3 |
| ISQA 8736 | Decision Support Systems | 3 |

$\begin{array}{ll}\text { Select one of the following: } \\ \text { ECON } 8300 & \text { Econometrics }\end{array}$
ISQA 8340 Applied Regression Analysis 3
ISQA 8160 Applied Distribution Free Statistics 3
$\begin{array}{lll}\text { Health Care Information Systems Focus: } \\ \text { ECON } 8600 & \text { Health Economics }\end{array}$
ISQA 8570 Information Security Policy and 3
Ethics
PA 8760 The U.S. Health Care System 3
ISQA 8400 Clinical Systems Architecture and 3
Function
ISQA 8500 Readings in Clinical Informatics

## MBA-MIS Non-Course Requirements:

Each student admitted to the dual degree option will, within the first semester of their enrollment, file a plan of study in close consultation with a graduate advisor.

## MBA-MIS Exit Requirements:

Capstone Courses (6 hours)
BSAD 8800 Policy, Planning and Strategy 3
ISQA 8950 Capstone Management Information Systems

All other core MBA courses must be completed prior to enrollment in this course. A requirement of this course is authoring a business case, analysis of that business case, and preparation of teaching materials for that business case. This course must be completed with a grade of B ( 3.0 on a 4.0 scale) or better.
Six (6) credit hours or fewer may be left in the student's program

All other core classes must have been completed except for ISQA 8380

## Thesis Option

To take this option, a student will be required to enroll in six (6) hours of thesis credit:

## MBA Program

BSAD 8990 Thesis 1-

## MS-MIS program

ISQA 8990 Thesis
The thesis must be in an area that relates to both the business administration and information systems domains. The Supervisory Committee must include at least one CBA faculty member and one ISQA faculty member.

## MBA-MIS-Other Program-Related Information:

## Transfer Credits

A student may transfer credits into the MBA/MIS dualdegree program subject to the following conditions:

- No more than $1 / 3$ of the credits for the dual-degree program may be transfer credits
- No more than $1 / 3$ of the business credits for the dual-degree program may be transfer credits
- No more than $1 / 3$ of the MIS credits for the dualdegree program may be transfer credits
- The transfer credits must conform to the transfer policies of the individual programs that make up the dual-degree program


## Other Requirements to Complete the Program

Attendance at a minimum of 3 MBA leadership seminars and completion of the integrative business case requirement

## Academic Performance

In addition to UNO Graduate College Quality of Work Standards, Dual Degree (DD) students may repeat only once a BSAD 8-0-level course in which they receive any grade, including "W" or "I". Students earning three "C/C+" grades, or a grade of "C-" or below, will be automatically dismissed from the DD program. Dismissed students will be immediately administratively withdrawn from all courses in which they are enrolled for DD credit.
Students who have been dismissed may not enroll in any courses for DD credit in any subsequent semester or summer session until reinstatement has been granted by the Dual-Degree Program Academic Standards Committee (DDPASC) comprised of the 2 GPC Chairs and 1 faculty member from each GPC.

Students who have been dismissed from the DD program may submit a written petition for reinstatement to the DDPASC. Students petitioning the DDPASC for reinstatement may not enroll in any course for DD credit until after the DDPASC has ruled on the petition. Upon receiving a petition for reinstatement, the DDPASC will evaluate the student's written petition for reinstatement. As part of the reinstatement petitioning process, the DDPASC reserves the right to examine the student's academic record and reserves the right to speak to any previous instructor who has taught the student; this information may be used by the DDPASC in the reinstatement decision. Information provided by previous instructors will not be shared with the student. Reinstatement is a privilege and not all students who are dismissed will be reinstated. Students who have been reinstated will serve a probationary period at the DDPASC's discretion and must satisfy the probationary conditions specified by the DDPASC. In addition to probationary conditions, reinstated students will be subject to additional reinstatement conditions as specified by the DDPASC. These reinstatement conditions will include retaking one or more courses in which the student must earn a grade of " B " (3.0) or higher (the exact grade requirements for retaken courses may in fact be higher than "B" (3.0)). Students not satisfying the probationary or reinstatement conditions will be automatically dismissed.

## Grades Earned in Repeated Courses

When making decisions related to the Quality of Work Standards issues outlined in the UNO Graduate Catalog, the Dual-Degree Program Academic Standards Committee (DDPASC) will consider the initial grade(s) received in a course as well as the most recent grade received for the course. This approach differs from the method used to calculate GPA in a student's mavlink/DegreeWorks file,
where the most recent grade replaces the grade received in the previous course attempt.

Total Credit Hours: 57

## HUMAN RESOURCES AND TRAINING CERTIFICATE

School of Communication, College of Communication, Fine Arts \& Media

Department of Psychology, College of Arts \& Sciences

## Department of Business Administration, College of Business Administration

## Vision Statement

The purpose of the Graduate Certificate in Human Resources and Training (HR \& T) is to help postbaccalaureate students and working professionals expand their educational background and enhance their knowledge in one of the two concentrations. The first concentration, Human Resources, focuses on enhancing organizational effectiveness through employee recruitment, selection, placement, performance evaluation, motivation, and retention. The second concentration, Training and Development, focuses on enhancing training skills including designing, implementing and assessing training programs. The $H R \& T$ Certificate is useful for individuals currently employed in the Human Resources or Training fields and for individuals who desire to enter those fields. The graduate courses required for this certificate address both theory and application from the fields of Communication, Psychology, and Business.

## Program Contact Information:

Dr. Karen Dwyer, Graduate Program Chair
Arts \& Sciences Hall (ASH) 107J
402-554-2253
kdwyer@unomaha.edu

## Application Deadlines:

- Fall: July 1
- Spring: December 1
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Required major in; OR minor in; OR at least fifteen (15) hours in one of the following areas with a 3.0 GPA:
- Speech/Communication
- Psychology
- Business
- Or related area
- One (1) letter of recommendation is required from a professor or supervisor
- A statement of purpose is required
- A 1000-word essay on why you seek admission to the program and indicate which area of concentration you will be pursuing.
- Resume
- Include work history


## CERT-HRST REQUIRED COURSES:

Students must identify an area of concentration.
See Human Resources and Training Certificate Concentrations (p. 178)

## Cert-HRST Exit Requirements

Portfolio: Students admitted to the HR\&T graduate certificate program must create a portfolio that represents their achievement in the five courses ( 15 credits). The portfolio will contain at least one sample project from each course. (Examples of projects for the portfolio might include: training manual, workshop outlines, complete job analyses, performance appraisals, test reviews and evaluations.) In order to complete the graduate certificate program (after the student completes all course work), a formal final review of the portfolio and presentation to the student's advisor will be required.

## Cert-HRST-Other Program-Related Information:

Dr. Karen Dwyer (Chair) - Communication - (402) 5542253 - kdwyer@unomaha.edu

Dr. Lynn Harland - Business Administration - (402) 554-2808-lharland@unomaha.edu

Dr. Roni Reiter-Palmon - Psychology - (402) 554-4810 -rreiter-palmon@unomaha.edu
Total Credit Hours: 15

## HUMAN RESOURCES AND TRAINING CERTIFICATE CONCENTRATIONS

## HUMAN RESOURCES CONCENTRATION

This concentration focuses on enhancing organizational performance through improving employee recruitment, selection, placement, performance evaluation, motivation, and retention.

## Required Course

( 3 hours; select one course from below):

| PSYC | Psychological and Educational | 3 |
| :--- | :--- | ---: |
| 8316/PSYC | Testing |  |
| 4310 |  | 3 |
| PSYC | Personnel Psychology |  |
| $8646 /$ PSYC |  |  |
| 4640 |  |  |
| Courses |  |  |

( 9 hours; select three courses from the list below):
BSAD 8350 Seminar in Management
PSYC 9660 Criterion Development and Performance Appraisal
One of the following:

| BSAD 8320 | Seminar in Human Resource <br> Management | 3 |
| :--- | :--- | ---: |
| SPCH | Communication Leadership and | 3 |
| $8186 /$ SPCH | Power in Organizations |  |
| 4180 |  |  |

One of the following:

| BSAD 8310 | Managing Performance in <br> Organizations | 3 |
| :--- | :--- | ---: |
| SPCH | Organizational Communication | 3 |
| $8176 /$ SPCH |  |  |
| 4170 |  |  |

One of the following:

| BSAD | Principles of Collaboration |
| :--- | :--- |
| 8096/MGMT |  |
| 4090 |  |
| ISQA 8080 | Seminar in Management <br> Information Systems |
| SPCH 8566 |  <br> Facilitation |

## Electives

(3 hours; select one course from the list below, or any other course on the list in either concentration):
COMM Topics in Speech Communication
8180

8806/SPCH
4800

SPCH
8536/SPCH
4530
SPCH
8516/SPCH
4510
SPCH
8706/SPCH
4700

## TRAINING AND DEVELOPMENT CONCENTRATION

This concentration focuses on enhancing training program design, implementation, assessment skills, and the developmental process through which organizations enhance work performance, communication, job satisfaction, and future career preparation.

## Required Courses

( 6 hours; select one course from each group):

## Group 1:

| SPCH | Communication Training and | 3 |
| :--- | :--- | :--- |
| $8156 /$ SPCH | Development Skills |  |
| 4150 |  |  |
| PSYC 9620 | Industrial Training and | 3 |
|  | Organizational Development |  |

Group 2:
EDAD 9650 Program Evaluation for Educational 3 Administrators
PSYC 9320 Seminar in Program Evaluation 3
HED 8750 Health Education: Instrmentation 3 and Evaluation

## Courses

(6 hours; select two courses from two of the groups below):
Group 1:
SPCH Organizational Communication 3

8176/SPCH
4170
BSAD 8310 Managing Performance in 3
Organizations
Organizational Psychology 3
8636/PSYC
4630

SPCH Conflict Mediation 3

PSYC 9030 Seminar: Topics in Industrial 3 -
Organizational Psychology
PSYC 9610 Industrial Motivation \& Morale 3
PSYC 9630 Leadership Theories and Research 3

Persuasion

Interpersonal Conflict

Group 2:

| SPCH | Communication for Instructional |
| :--- | :--- |
| $8166 /$ SPCH | Settings |
| 4160 |  |
| Group 3: |  |
| SPCH | Communication Leadership and |
| 8186/SPCH | Power in Organizations |
| 4180 |  |
| BSAD 8350 | Seminar in Management |
| Group 4: |  |
| SPCH 8566 |  |
|  | Facilitation |
| BSAD | Principles of Collaboration |
| 8096/MGMT |  |
| 4090 |  |
| ISQA 8080 | Seminar in Management |
|  | Information Systems |

## Electives

( 3 hours; select one course from the list below, OR any other course on the list in either concentration):
COMM Topics in Speech Communication 3

8180
SPCH Conflict Mediation
8806/SPCH
4800
PSYC 9030 Seminar: Topics in Industrial 3Organizational Psychology
PSYC 9610 Industrial Motivation \& Morale 3
PSYC 9630 Leadership Theories and Research 3
SPCH Intercultural Communication
8536/SPCH
4530
SPCH
Persuasion
8516/SPCH
4510
SPCH Interpersonal Conflict
8706/SPCH
4700
M.P.A./M.I.S.

## School of Public Administration, College of Public Affairs \& Community Service

Department of Information Systems \& Quantitative Analysis, College of Information Science \& Technology

## Vision Statement

In government and non-profit organizations, there is a significant need and a long-term demand for persons with advanced skills in information management technology. The primary purpose of this dual degree option is to prepare students to manage and lead organizations in the future. To meet this need, the School of Public

Administration and the College of Information Science \& Technology offer the option to complete both the MPA and the MS in MIS degree jointly by completing 54-57 hours of course work beyond foundation requirements. This joint degree program is designed for dedicated students who are able to successfully complete graduate intensive study from two perspectives-Public Administration and Management Information Systems-while achieving a synergy between the two fields. As such, the program involves graduate coursework in both public administration and information systems, with integrative experiences that will attain the desired synergy. Students interested in this option will work closely with a faculty mentor to develop an integrated plan of study at an early stage.

## Program Contact Information

## (Public Administration):

Dr. Carol Ebdon, Graduate Program Chair (GPC)
College of Public Affairs \& Community Service (CB) 111B
402-554-2152
cebdon@unomaha.edu
Meagan VanGelder, Coordinator
College of Public Affairs \& Community Service (CB) 111
402-554-3480
mvangelder@unomaha.edu
(Management Information Systems):
Dr. Peter Wolcott, Graduate Program Chair (GPC)
Peter Kiewit Institute (PKI) 177E
402-554-3158
pwolcott@unomaha.edu
Ms. Carla Frakes, Advisor
Peter Kiewit Institute (PKI) 176C
402-554-2073
cfrakes@unomaha.edu
Program Website:
http://www.isqa.unomaha.edu/gmpa-mis.htm

## Application Deadlines:

- Fall: June 1
- Spring: October 1
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the United States, the United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL and GRE scores.
- The minimum TOEFL requirement is 550 (or 213 if computer-based TOEFL) or IELTS with a score of 6.5 or better or PTE with a score of 59 or better.
- The general prerequisite for admission to the program is a four-year bachelors' degree with a minimum of a 3.0 GPA of the junior-senior year (last 50-60 credit hours).
- Graduate Record Exam (GRE)
- Two (2) letters of recommendation
- Statement of Purpose
- Writing Sample
- From work or previous academic experiences. Alternatively, if you do not have a writing sample, please submit a two -page double-spaced word processed essay that addresses the following two topics:
- Discussion of two accomplishments that demonstrate your potential for success in the graduate program
- Discussion of your unique personal qualities and life experiences that distinguish you from other applicants to our graduate program
- Resume indicating your work experience and background


## MPA-MIS DEGREE REQUIREMENTS

## MPA-MIS Foundation Courses:

A student must have completed some basic courses either as an undergraduate student or prior to enrolling in the first MS in MIS course. Students may start MPA courses while
completing the MIS foundation courses. More information on specific foundation requirements is available on the Department for Information Science \& Technology website for the MS in MIS program.
Six (6) hours of programming coursework or equivalent experience:

| CIST 1400 | Introduction to Computer | 3 |
| :--- | :--- | :--- |
| CSCI 1620 | Programming | Introduction to Computer Science II |

or equivalent
one semester of undergraduate information systems,
or:
$\begin{array}{ll}\text { CIST } 2100 & \begin{array}{l}\text { Organizations, Applications and } \\ \text { Technology }\end{array}\end{array}$
or equivalent
one semester of undergraduate statistics, or:
CIST 2500 Introduction to Applied Statistics for 3 IS\&T.
One of the following:

| ISQA 8040 | An Overview of Systems <br> Development <br> Or | 3 |
| :--- | :--- | ---: |
| ISQA 4110 | Information Systems Analysis <br> And | 3 |
| ISQA 4120 | System Design and Implementation <br> or equivalent | 3 |
| One of the following: |  |  |
| ISQA 8050 | Data Organization and Storage <br> Or | 3 |
| ISQA 3300 | File Structures for Information <br> Systems <br> And <br> Managing the Data Base <br> Environment | 3 |
| ISQA 3310 | En | 3 |

Subtotal: 9
or equivalent

| MPA-MIS Required Courses (39 hours): |  |  |
| :---: | :---: | :---: |
| MPA Beginning Core Courses (9 hours): |  |  |
| PA 8010 | The Public Economy | 3 |
| PA 8050 | Public Administration and | 3 |
|  | Democracy |  |
| PA 8090 | Organization Theory and Behavior | 3 |
| MS in MIS Core Courses (18 hours): |  |  |
| ISQA 8210 | Management of Software | 3 |
|  | Development |  |
| ISQA 8220 | Advanced Systems Analysis and | 3 |
|  | Design |  |
| ISQA 8310 | Data Communications | 3 |
| ISQA 8380 | Managing the Distributed | 3 |
|  | Computing Environment |  |


| ISQA 8410 | Database Management |
| :---: | :---: |
| ISQA 8420 | Managing the IS Function |
| Methods course (3 hours): |  |
| PA | Research Methods for Public |
| 8120/AVN | Administration |
| 8120 |  |
|  | OR |
| ISQA 8060 | Research in MIS |
| MPA Ending Core Courses (9 hours): |  |
| PA 8300 | Policy Design and Implementation |
| Choose one of the following: |  |
| PA 8320 | Public Policy Evaluation |
| PA 8450 | Seminar in Advanced Management Analysis in Public Agencies |
| PA 8330 | Seminar in Policy Analysis |
| Choose one of the following: |  |
| PA 8440 | Organization Develop. \& Planned Change in the Public Sector |
| PA 8530 | Strategic Planning \& Mgmt in Public \& Non-Profit Organiz. |

*If taking the Program Management specialty area, a student must take PA 8320 or PA 8330 as part of the MPA ending core.

## MPA-MIS Electives ( 12 hours):

Students will take a minimum of $\mathbf{6}$ hours each of ISQA elective courses and PA elective courses.
Students may choose to specialize in the following areas, or in another area with the approval of their faculty advisor.

In any case, one of these courses must be:
PA 8400 Public Budgeting $\quad 3$

PA 8720 Health Care Finance 3
PA 8896/PA Critical Issues in Aviation 3
4890/AVN Administration
4890/AVN
8896
and all courses must be at the 8000 -level.

| Program Management |  |
| :--- | :--- |
| PA 8450 | Seminar in Advanced Management <br> Analysis in Public Agencies |
| PA 8400 | Public Budgeting |
| ISQA 8810 | Information Technology Project <br> Fundamentals |
| ISQA 8820 | Project Risk Management |

Financial Management Information Systems
PA Seminar in Public Financial
8480/AVN Administration
8480
PA $8400 \quad$ Public Budgeting
ISQA IT Audit and Control
8596/ISQA

| 4590 |  |  |
| :---: | :---: | :---: |
| ISQA 8570 | Information Security Policy and Ethics | 3 |
| Health Care Information Systems |  |  |
| HSRA 872 | Health Care Finance | 3 |
| HSRA 874 | Health Care Policy | 3 |
| ISQA 8570 | Information Security Policy and Ethics | 3 |
| ISQA 8400 | Clinical Systems Architecture and Function | 3 |
|  | Integrative Experience (Required) | 36 |
| The HRSA classes are completed through UNMC. |  |  |
| MPA-MIS Exit Requirements (6 hours): |  |  |
| Capstone Courses: |  |  |
| PA 8990/PA | Capstone Project in Public | 3 |
| 4990 | Administration |  |
| ISQA 8950 | Capstone Management Information Systems | 3 |
| Six credit hours or fewer may be left in the program. All other core classes must have been completed except ISQA 8380. |  |  |
| Thesis Option |  |  |
| To take this option, a student will be required to enroll in six (6) hours of thesis credit. |  |  |
| Either in the MPA program: |  |  |
| PA 8990/PA | Capstone Project in Public | 3 |
| 4990 | Administration |  |
| or in the MS-MIS program: |  |  |
| ISQA 8990 | Thesis | 3 |

The thesis must be in an area that relates to both the public administration and information systems domains.
Total Credit Hours: 57
M.S.W./M.P.A.

Grace Abbott School of Social Work and School of Public Administration, College of Public Affairs \& Community Service

## Vision Statement

The MSW/MPA program prepares students to provide a variety of advanced direct and indirect social work services and assume leadership in the public service sector, specifically in administrative and policy work with governmental units and nonprofit organizations.

## Program Contact Information: <br> (Social Work)

Dr. Peter Szto, Graduate Program Chair (GPC)
College of Public Affairs \& Community Service (CB) 205 402-554-2330

## pszto@unomaha.edu

## (Public Administration)

Dr. Carol Ebdon, Graduate Program Chair (GPC)
College of Public Affairs \& Community Service (CB)
111B
402-554-2152
cebdon@unomaha.edu
Meagan VanGelder, Coordinator
College of Public Affairs \& Community Service (CB) 111
402-554-3480
mvangelder@unomaha.edu

## Program Website:

http://www.unomaha.edu/socialwork/graduate.php\#mpa

## Application Deadlines:

- Fall: January 15
- Spring: NA
- Summer: NA


## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- International applicants who do not have a baccalaureate or equivalent degree from an Englishspeaking institution of higher education in the US, United Kingdom, Canada, English-speaking Africa, Australia, Ireland or New Zealand are required to submit TOEFL scores
- The minimum TOEFL requirement is 550 (written) or 213 (computer-based); minimum IELTS requirement is 6.5 ; minimum PTE requirement is 59.
- The general prerequisite for admission to the program is a four-year bachelors' degree with a minimum of a 3.0 GPA (on a 4.0 scale) in the junior and senior years (last 50-60 hours).
- Graduate Record Exam (GRE) scores
- Three (3) Letters of Recommendation
- Two (2) Statements of Purpose, one for the School of Public Administration and one for the School of Social Work
- For Social Work, please answer the following statements/questions in a total of five doublespaced, typewritten pages (12-point font). Your application is considered incomplete if these instructions are not followed.
- A brief autobiographical statement that discusses who you are and the experiences that led you to social work. Trace the development of your interest in social work. Why have you chosen social work as a profession? Describe the key motivating figure(s), role model(s), or experience(s) important to your decision to become involved in social work.
- Discuss your career objectives as a professional social worker as you now conceive them. What do you see yourself doing immediately after receiving your MSW degree?
- Discuss a contemporary social problem. Include possible causes and potential solutions in your response. What contribution do you want to make to the pursuit of social and economic justice?
- In the School's criteria for admission, we assert our commitment in having students representing diverse backgrounds. Diversity is defined by virtue of: personal characteristics such as race, gender, age, sexual orientation, disability and geography, as well as life experiences such as career history, experience dealing with a significant personal challenge, belonging to or working in or among another culture, economic disadvantage, knowledge of more than one language, and/or deep broad life experiences. What evidence can you present to demonstrate your capacity to work with human diversity?
- For Public Administration, the essay should answer the following questions:
- Please tell us about the factors in your background that will help us understand your interest in a profession in the public or nonprofit sectors.
- What are your professional goals? Ten years from now, what do you hope to be doing professionally?
- How can this dual degree from UNO help you achieve these goals?
- Resume


## MSW-MPA DEGREE REQUIREMENTS

Completion of these prerequisite courses is required before entry into the program:

An undergraduate human biology course or equivalent
An undergraduate research methods course
An undergraduate statistics course
MSW-MPA Required Courses:
Foundation Program Requirements (24 hours):
SOWK $8070 \quad \begin{aligned} & \text { Human Behavior and the Social } \\ & \text { Environment I }\end{aligned}$ Environment I
SOWK 8080 Human Behavior and Social Environment II
SOWK 8090 Social Welfare Policy
SOWK 8110 Institutional Oppression
SOWK 8130 Generalist Practice I
I
SOWK 8150 Generalist Practice II 3
SOWK 8160 Generalist Social Work Practicum I 3
SOWK 8170 Generalist Social Work Practicum II 3

## Required Courses (54 hours):

$\begin{array}{lll}\text { PA } 8050 & \text { Public Administration and } & 3 \\ & \text { Democracy }\end{array}$
PA 8010 The Public Economy 3
PA 8090 Organization Theory and Behavior 3
PA $8300 \quad$ Policy Design and Implementation 3
SOWK 8190 Research \& Computer Applications 3
SOWK 8220 Clinical Social Work with 3
Individuals
SOWK 8250 Social Work Practice with Families 3
SOWK 8510 Supervision and Personnel 3
Administration
SOWK 8540 Social Welfare Planning 3
SOWK 8560 Advanced Community Practice 3
SOWK 8570 Administration of Social Welfare 3
Agencies
SOWK 8940 Evaluation of Social Programs
One of the following:

| PA 8400 | Public Budgeting | 3 |
| :--- | :--- | :--- |
| PA | Seminar in Public Financial | 3 |
| 8480/AVN | Administration |  |
| 8480 |  | 3 |
| PA 8720 | Health Care Finance |  |

One of the following:
PA 8530 Strategic Planning \& Mgmt in Public
\& Non-Profit Organiz.
PA $8440 \quad$ Organization Develop. \& Planned 3 Change in the Public Sector

One social work social issues/policies/service delivery course
(choose from the following):
SOWK 8600 Permanence for Children
SOWK 8610 Family and Community Violence 3
SOWK 8650 Health/Mental Health Policy for 3
Social Work
SOWK Medical and Psychosocial Aspects 3
8686/COUN of Alcohol/Drug Use and Addiction
8686/SOWK
4680/COUN
4680
SOWK 8400 Advanced Social Work Practicum I 3
SOWK 8410 Advanced Social Work Practicum II 3 -

## One Social Work elective

(choose from the following):
SOWK 8230 Clinical Social Work with Groups 3
SOWK 8240 Social Work Practice with Children 3
SOWK 8260 Social Work Practice with Older 3
Adults
SOWK 8270 Social Work Practice with Sexual 3
Concerns
SOWK 8280 Social Work Practice with Couples 3 and Changing Family Structures
SOWK 8290 Social Work Practice in Health and 3 Mental Health
SOWK 8420 Advanced Social Work Practicum 1-
III
SOWK Treatment Issues in Chemical 3
8516/COUN Dependency
8516/SOWK
4510/COUN
4510
SOWK 8550 Social Justice and Social Advocacy 3
SOWK 8600 Permanence for Children 3
SOWK 8610 Family and Community Violence 3
SOWK 8650 Health/Mental Health Policy for 3
Social Work
SOWK Medical and Psychosocial Aspects
of Alcohol/Drug Use and Addiction
8686/SOWK
4680/COUN
4680
SOWK Assessment and Case Management
8696/COUN
8696/SOWK
4690/COUN
4690
SOWK 4800 Social Work and the Law

| SOWK 8816 | Spirituality and Social Work <br> Practice | 3 |
| :--- | :--- | ---: |
| SOWK 8856 | Hospice \& Other Services for the <br> Dying Patient/Family | 3 |
| SOWK 8866 | Women's Issues and Sexism: A <br> Social Work Perspective <br> Topical Seminar in Social Work | 3 |
| SOWK | 3 |  |
| 8886/SOWK |  | 3 |
| 4880 | Special Studies in Social Welfare | $1-$ |
| SOWK 8900 | SSW-MPA Exit Requirements: |  |
| MSW | 3 |  |
| PA90/PA | Capstone Project in Public <br> 4990 | Administration <br> Comprehensive Examination |

Students will complete a social work comprehensive exam focused on Advanced Generalist Social Work Practice, administered by the Grace Abbott School of Social Work. The comprehensive exam is offered twice each academic year, during the Fall and Spring semesters. It is recommended that students take the comprehensive exam during the semester of graduation, but they may take it earlier, provided no more than 12 semester hours are remaining to complete after the semester in which the comprehensive exam is taken.

## TOTAL CREDIT HOURS:

Dual degree requirements: 57
Dual degree requirements AND foundation courses: 81

## Academic Policies and Standards

- A student must maintain a cumulative grade point average of 3.0 or higher in all graduate work taken as part of a master's program, including courses taken for a certificate. Additionally, a student must receive a grade of "B" or higher in social work practicum courses (SOWK 8160, SOWK 8170, SOWK 8400, SOWK 8410, and SOWK 8420).
- A student whose cumulative GPA drops below 3.0 or who receives a grade of "C + " ( 2.33 on a 4.0 scale) or below in nine credit hours will be considered in academic difficulty and will receive a Student Review. If a student receives a grade in a social work practicum that is lower than a " B ", he or she will receive a Level 2 or 3 Review, depending on whether the student has had a previous Review. If a student is on academic probation and receives a grade of "B-" or lower, the School will recommend the Office of Graduate Studies dismiss the student from the program. (Probation means that a grade of " B " [ 3.0 on a 4.0 scale] or higher is required for all courses taken.)
- When a student is dismissed from the MSW program by the UNO Office of Graduate Studies, a student may request reinstatement if the student was "in good standing" prior to the incident preceding the dismissal.
- The Academic Policies and Standards can be found at: www.unomaha.edu/socialwork/documents/academic_p olicies.pdf.


## MSW-MPA-Other Program-Related Information:

- See the Grace Abbott School of Social Work website for requirements and for details about research, practicum, waiver exams, etc. The website is www.unomaha.edu/socialwork/graduate.php.
- The Master of Social Work (MSW) program prepares students for advanced social work practice. Master's level social workers are employed in public and private agencies, including medical settings, schools, residential treatment centers, court and correctional agencies, and community planning and development agencies. Their activities and interventions are designed to promote a more effectively functional society as it struggles to "provide for the general welfare," as well as to help people, families, groups, and institutions within that society achieve selffulfillment.
- The MSW degree at the Grace Abbott School of Social Work is accredited by the Council on Social Work Education (CSWE), the national accrediting body for all social work education.
- Information on certification and licensure is available on the Nebraska Department of Health and Human Services' website: www.unomaha.edu/socialwork/certification.php.


## TECHNICAL COMMUNICATION CERTIFICATE

Department of English and School of Communication, College of Arts \& Sciences

## Vision Statement

The Graduate Certificate in Technical Communication is designed for graduate students and industry professionals seeking a foundation in the theory and practice of Technical Communication. This foundation provides students with the kinds of competencies expected from technical communication professionals, including writing, editing, design, and software applications.

The Technical Communication Certificate is designed for the following students:

- Part- and full-time UNO students pursuing graduate degrees, who are seeking a cognate area outside, but relevant to, their primary program of study;
- Industry professionals seeking to develop the knowledge and skills for a career in Technical Communication; and
- Business or technical professionals seeking to enhance their employment opportunities through a professional development program.


## Program Contact Information:

Dr. Tracy Bridgeford, Graduate Program Chair (GPC)
Arts \& Science Hall (ASH) 192
402-554-3312
tbridgeford@unomaha.edu

## Application Deadlines:

Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

## Application Requirements:

- Online Application
- One official copy of transcripts for ALL institutions previously attended
- Application Fee
- If English is not the language of nurture, official test scores from the TOEFL, IELTS, or PTE exam are required
- 500 on the written TOEFL
- 173 on the computer-based TOEFL
- 61 on the internet-based TOEFL
- 5.5 on the IELTS
- 44 on the PTE
- Minimum GPA of at least 3.0 in undergraduate courses related to proposed major


## Program-Specific Requirements:

- Applicants must have completed a baccalaureate degree in English or a related degree with at least a 3.0 (on a 4.0 scale) GPA
- Statement of Purpose
- The statement, about 500-1000 words, should articulate the applicant's career goals regarding interest in technical communication, any relevant work or life experience, reason for pursuing a Graduate Certificate in Technical Communication, and anything else that might help convey the applicant's personality, spirit, or intellectual character
- Writing Sample
- Preferably a technical document such as a report; an academic essay is also acceptable
- If an applicant has been admitted to either the MA in English or the MA in Communication, neither an application fee nor transcripts are required


## CERT-TECC DEGREE REQUIREMENTS

Cert-TECC Required Courses ( 12 hours):
Required Core Courses:

| ENGL 8816 | Digital Literacies for Technical <br> Communicators | 3 |
| :--- | :--- | :--- |
| ENGL | Technical Communication | 3 |
| 8836/ENGL |  |  |
| 4830/JOUR |  |  |
| 4830/JOUR |  | 3 |
| 8836 |  |  |
| ENGL | Information Design for Technical | 3 |
| 8856/ENGL | Communicators |  |
| 4850/JOUR |  |  |
| 4850/JOUR |  |  |
| 8856 |  | 3 |
| ENGL 8876 | Technical Editing |  |

or another approved course
Cert-TECC Electives (3 hours):
ENGL Capstone Course in Technical 3

8896/ENGL Communication
4890/JOUR
4890/JOUR
8896
SPCH Communication Training and 3
8156/SPCH Development Skills
4150
SPCH Computer-Mediated Communication
8196/SPCH
4190
SPCH
Intercultural Communication

8536/SPCH
4530
Some courses from English or the School of Communication may be substituted with the director's approval.

## Cert-TECC Exit Requirements:

Students will assemble a portfolio representing their achievement in the five courses ( 15 hours). The portfolio will contain at least one writing sample/project from each course and will be reviewed by the Technical
Communication program director and one other member of the Graduate Faculty from the Department of English or the School of Communication. Faculty teaching these courses will be aware of this portfolio requirement and will assign work that can be used as part of the portfolio (e.g., a report, user's manual, web site, etc.).

## Total Credit Hours: 15

## Graduate Minors

## ART HISTORY MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## AVIATION MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## BLACK STUDIES MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## BUSINESS ADMINISTRATION MINOR

Graduate students may complete a graduate minor in Business Administration. The minor requires the approval of the MBA Advisor, completion of the MBA Foundation Courses, and the completion of nine (9) graduate credit hours of BSAD courses, at least six (6) of which are in BSAD courses open only to graduate students (8000-level or higher), excluding courses which are Foundation courses for any degree program. BSAD 8060 and BSAD 8800 cannot be counted toward the minor. A grade of "B" of better must be earned in each course counting toward the minor. All hours counting toward the minor must be earned at UNO.

## Academic Performance:

In addition to the Quality of Work Standards established by the Graduate College, MBA students may repeat only once a BSAD 8000-level course in which they receive any grade, including "W" or "I".
Each semester, all student files will be reviewed in which a student received a grade lower than a "B" (3.0 on a 4.0 scale). Following this review, the Graduate Program Council (GPC) may place conditions or restrictions on the student. Following notification to the student, the student may petition the GPC for a review of the conditions or restrictions imposed.
Students earning a third grade of "C+" or lower (or any single grade below "C", 1.67 on a 4.0 scale) will be automatically dismissed from the MBA program. Dismissed students will be immediately administratively withdrawn from all courses in which they are enrolled for MBA credit. Students who have been dismissed may not enroll in any courses for MBA credit in any subsequent semester or summer session until reinstatement has been granted by the College of Business Administration's Graduate Program Council (CBA GPC) and the Dean of Graduate Studies.

Students who have been dismissed from the MBA program may submit a written petition for reinstatement to the CBA GPC. Students who have petitioned the CBA GPC for reinstatement may not enroll in any courses for MBA credit. Upon receiving a petition for reinstatement, the CBA GPC will evaluate the student's written petition for reinstatement. As part of the reinstatement petition process, the CBA GPC reserves the right to examine the student's academic record and reserves the right to speak to any previous instructor who has taught the student, and
this information may be used by the CBA GPC in the reinstatement decision. Information provided by previous instructors will not be shared with the student. Reinstatement is a privilege and not all students who are dismissed will be reinstated. Students who have been reinstated will serve a probationary period at the CBA GPC's discretion and must satisfy the probationary conditions specified by the CBA GPC. These reinstatement conditions will include retaking one or more courses in which the student must earn a grade of "B" (3.0) or higher (the exact grade requirements for retaken courses may in fact be higher than "B" [3.0]). Students not achieving the probationary or reinstatement conditions will be automatically dismissed.

## GPC Will Consider Grades Earned in Repeated Courses

When making decisions based on Quality of Work Standards issues, the GPC will consider the initial grade(s) received in a course as well as the most recent grade received for the course. This approach differs from the method used to calculate GPA in a student's Mavlink/DegreeWorks file, where the most recent grade replaces the grade received in the previous attempt.

## Student Responsibilities

Each student admitted to graduate study is responsible for knowing the procedures and regulations of the Graduate College.

Each student should also consult with their MBA advisor at least once each semester to assure continued progress toward the degree objective. Students must maintain a 3.0 ("B") GPA average to fulfill the program and graduation requirements. No more than two "C's" or two "C+'s" in graduate courses are permitted.

## Enrollment of Non-Degree Students

Students seeking enrollment in graduate-level MBA classes must complete the GMAT and qualify for admission to the MBA program. Following a review of their transcripts by the MBA Advisor, non-degree students may be permitted to enroll in MBA foundation courses, BSAD 8110 and BSAD 8180 (3.0 Junior/Senior GPA required).

## Transfer of Graduate Credit

Students who have completed graduate courses at other approved AACSB (Association to Advance Collegiate Schools of Business) graduate schools may request permission to transfer as many as nine (9) semester hours of credit, provided the courses are pertinent to the student's graduate program. Grades in courses for transfer credit must be equivalent to " B " ( 3.0 on a 4.0 scale) or higher. All work for transfer of credit must have been taken within the ten-year period allowed for the master's degree. Petitions for the transfer of credit are submitted by the student to the MBA Advisor, who forwards the petition
with a recommendation to the Dean of Graduate Studies for approval. Visit the AACSB website for the listing of AACSB accredited institutions: http://www.aacsb.edu. To transfer credit for BSAD 8800, a student must also complete a comprehensive examination.

## CHEMISTRY MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## CRIMINOLOGY AND CRIMINAL JUSTICE MINOR

## (9 hours) <br> REQUIREMENTS

## Required course ( 3 hours):

CRCJ 8020 Seminar in Administration of Justice 3
Elective courses ( 6 hours-select two):
CRCJ 8040 Seminar in Police and Society 3
CRCJ 8050 Seminar in Corrections 3
CRCJ 8060 Seminar in the Criminal Court 3 System
CRCJ 8080 Seminar in Juvenile Justice 3
CRCJ 8130 Seminar in Women and Criminal 3
CRCJ 8210 Program Evaluation and Policy 3
Analysis
CRCJ 8230 Terrorism 3
CRCJ 8190 Independent Study 1 -
CRCJ 9020 Seminar on Theories of Crime
CRCJ 9150 Special Topics in Criminology and 3 Criminal Justice
CRCJ 9160 Seminar in Community-Based 3 Corrections
CRCJ 9170 Seminar on Institutional Corrections 3
CRCJ 9200 Seminar on Violent Crime and 3

## ECONOMICS MINOR

## (9 hours)

The Department of Economics offers a graduate minor to students pursuing a graduate degree in other programs.
The requirement for the minor is that the student completes a minimum of three graduate courses ( 9 hours) in economics with grades of " B " or better ( 3.0 on a 4.0 scale) in each course. The courses to be taken for the minor are to be approved by both the student's advisor in the student's major subject and by the Graduate Program Chair of Economics.

## ENGLISH MINOR

## (9 hours) <br> REQUIREMENTS

| 9 hours to be selected from the following: |  |  |
| :---: | :---: | :---: |
| ENGL | American Poetry | 3 |
| 8026/ENGL |  |  |
| 4020 |  |  |
| ENGL | Contemporary Poetry of England | 3 |
| 8046/ENGL | and America |  |
| 4040 |  |  |
| ENGL | The American Novel | 3 |
| 8066/ENGL |  |  |
| 4060 |  |  |
| ENGL | The American Drama | 3 |
| 8086/ENGL |  |  |
| 4080 |  |  |
| ENGL 8100 | Seminar: Topics in American | 3 |
|  | Literature |  |
| ENGL | American Literary Realism and | 3 |
| 8146/ENGL | Naturalism |  |
| 4140 |  |  |
| ENGL 8150 | Seminar: Theodore Roethke's Poetry | 3 |
| ENGL 8160 | Seminar: Postmodern Fiction of the | 3 |
|  | United States |  |
| ENGL | Topics in American Regionalism | 3 |
| 8166/ENGL |  |  |
| 4160 |  |  |
| ENGL 8180 | Seminar: Contemporary American | 3 |
|  | Poetry |  |
| ENGL | Major Movements in Contemporary | 3 |
| 8186/ENGL | Literature |  |
| 4180 |  |  |
| ENGL 8200 | Seminar: Middle English Literature | 3 |
| ENGL | Latino Literature | 3 |
| 8236/ENGL |  |  |
| 4230 |  |  |
| ENGL 8250 | Seminar: Chaucer | 3 |
| ENGL | Introduction to Women's Studies in | 3 |
| 8256/ENGL | Literature |  |
| 4250 |  |  |

ENGL
$8266 / E N G L$
4260
ENGL 8276
ENGL 8300
ENGL
8316/ENGL 4310
ENGL
8326/ENGL
4320
ENGL
8336/ENGL
4330
ENGL
8346/ENGL 4340
ENGL
8356/ENGL
4350
ENGL
8366/ENGL
4360
ENGL Restoration and Eighteenth Century
8376/ENGL
4370
ENGL
8386/ENGL
4380
ENGL 8396
ENGL 8400
ENGL
8416/ENGL
4410
ENGL
8426/ENGL
4420
ENGL 8473
ENGL 8450
ENGL
8466/ENGL
4460
ENGL
8486/ENGL
4480
ENGL 8500
ENGL 8600
ENGL 8615
ENGL 8620
ENGL
8626/ENGL
4620
ENGL Structure of English

| $\begin{aligned} & \text { 8656/ENGL } \\ & 4650 \end{aligned}$ |  |  |
| :---: | :---: | :---: |
| ENGL | Sociolinguistics | 3 |
| 8676/ENGL |  |  |
| 4670 |  |  |
| ENGL 8680 | Seminar: Workshop in Tom | 3 |
|  | Stoppard's Plays |  |
| ENGL | Topics in Linguistics | 3 |
| 8696/ENGL |  |  |
| 4690 |  |  |
| ENGL | Rhetoric | 3 |
| 8736/ENGL |  |  |
| 4730 |  |  |
| ENGL 8740 | Seminar: Discourse, Culture, and | 3 |
|  | Power |  |
| ENGL | Composition Theory and Pedagogy | 3 |
| 8756/ENGL |  |  |
| 4750 |  |  |
| ENGL | Seminar in Popular Culture, Mass | 3 |
| 8760/COMM | Media and Visual Rhetoric |  |
| 8200 |  |  |
| ENGL 8780 | Pedagogic Field Experience in | 3 |
|  | TESOL |  |
| ENGL | English Career Preparation | 1 |
| 8796/ENGL |  |  |
| 4790 |  |  |
| ENGL 8800 | Seminar: Topics in English | 3 |
|  | Language and Literature |  |
| ENGL 8806 | English Internship | - |
|  |  | 3 |
| ENGL 8816 | Digital Literacies for Technical | 3 |
|  | Communicators |  |
| ENGL 8826 | Autobiography | 3 |
| ENGL | Technical Communication | 3 |
| 8836/ENGL |  |  |
| 4830/JOUR |  |  |
| 4830/JOUR |  |  |
| 8836 |  |  |
| ENGL | Travel Writing | 3 |
| 8846/ENGL |  |  |
| 4840 |  |  |
| ENGL 8850 | Sem: Spiritual Nonfiction | 3 |
| ENGL | Information Design for Technical | 3 |
| 8856/ENGL | Communicators |  |
| 4850/JOUR |  |  |
| 4850/JOUR |  |  |
| 8856 |  |  |
| ENGL | The Modern Familiar Essay | 3 |
| 8866/ENGL |  |  |
| 4860 |  |  |
| ENGL 8870 | Seminar: Publishing Non-Fiction | 3 |
| ENGL 8876 | Technical Editing | 3 |
| ENGL 8880 | Advanced Placement Institute: | 3 |
|  | English \& Compositions |  |
| ENGL | Community Service Writing | 3 |

8886/ENGL 4880

| ENGL 8890 | Sem: Experiments in Creative <br> Nonfiction | 3 |
| :--- | :--- | ---: |
| ENGL | Capstone Course in Technical | 3 |
| 8896/ENGL | Communication |  |
| 4890/JOUR |  |  |
| 4890/JOUR |  | $1-$ |
| 8896 |  | 3 |
| ENGL 8900 | Independent Study | 3 |
|  |  | 3 |
| ENGL 8910 | Seminar: Critical Theory | 3 |
| ENGL 8926 | Great Characters |  |
| ENGL | History of Literary Criticism |  |
| 8946/ENGL |  | 3 |
| 4940 | Topics in Language and Literature |  |
| ENGL |  |  |
| 8966/ENGL |  |  |

The following English seminars vary in emphasis and may be repeated for credit:
ENGL 8100 Seminar: Topics in American 3

Literature
ENGL 8200 Seminar: Middle English Literature 3
ENGL 8400 Seminar: English Renaissance 3
ENGL 8500 Seminar: Restoration and Eighteenth 3 Century
ENGL 8600 Seminar: Nineteenth-Century 3
English Literature
ENGL 8800 Seminar: Topics in English 3
Language and Literature
ENGL 8900 Independent Study 1 -
ENGL 9210
此

## FRENCH MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.
The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## GERMAN MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## GEOGRAPHY MINOR

## (9 hours) <br> REQUIREMENTS

## (9 hours):

GEOG 8000 History and Philosophy of Geography Additional geography courses selected in consultation with the graduate program chair

## GERONTOLOGY MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## HISTORY MINOR

## (9 hours)

To earn a graduate minor in history, a student must complete 9 hours of graduate-level history courses with the grade of a "B" ( 3.0 on a 4.0 scale) or better.

## NATIVE AMERICAN STUDIES MINOR

## (9 hours)

The minimum requirement for the graduate minor is 9 credits taken at the 8000 and/or 9000 levels.

A student's program will be planned in consultation with the Native American Studies (NAS) Graduate Advisor, who will hold Graduate Faculty status. This crossdisciplinary minor will include choices among approved graduate lecture courses, seminars, and Directed Reading courses.

Three (3) hours of thesis can be counted toward the minimum requirement of 9 credits, but only in the Graduate Advisor and the thesis committee members agree that the topic is related to Native American Studies.

Students must complete each course of their 9-credit minor with a grade of "B" ( 3.0 on a 4.0 scale) or better.
No comprehensive exam will be required after completion of the three required courses for the minor.

## MANAGEMENT INFORMATION SYSTEMS MINOR

## (9 hours):

The Management Information Systems Department offers a graduate minor to students pursuing graduate degrees in other programs at the University of Nebraska. The requirements for the minor are that the student completes a minimum of three graduate courses (nine semester hours ending in 0 ), receiving a grade of " B " ( 3.0 on a 4.0 scale) or better in each. The courses to be taken for the minor are to be approved by the student's advisor in the student's major subject and by the Graduate Program Committee chair in management information systems. For declaring an MIS minor, a minimum TOEFL score of 550 is required and GRE or GMAT minimum scores (verbal score and comprehensive score) at the 50th percentile are required.

## MATHEMATICS MINOR

## (9 hours)

## REQUIREMENTS

To earn a graduate minor in Mathematics, a student must complete nine hours of graduate-level mathematics with at least six hours of graduate-only courses. In addition, all grades earned must be grades of " $B$ " or better.

[^0]Teachers

| MATH 8020 | Topics in Geometry and Topology | 3 |
| :--- | :--- | :--- |
| MATH 8040 | Topics in Computer Science | 3 |
| MATH | Design and Analysis of Algorithms | 3 |
| $8080 /$ CSCI |  |  |
| 8080 |  |  |

MEDIEVAL AND RENAISSANCE STUDIES MINOR

## (9 hours) <br> REQUIREMENTS

| 9 hours to be selected from the following: |  |
| :---: | :---: |
| ART | Women in Ancient and Medieval |
| 8726/ART | Art |
| 4720 |  |
| ART | Late Roman and Byzantine Art |
| 8756/ART | History |
| 4750 |  |
| ART | Early Medieval Art History |
| 8776/ART |  |
| 4770 |  |
| ART | Later Medieval Art History |
| 8786/ART |  |
| 4780 |  |
| ART | Northern European Renaissance Art |
| 8816/ART | History |
| 4810 |  |
| ART | Italian Renaissance Art History |
| 8836/ART |  |
| 4830 |  |
| ART 8910 | Independent Study in Art History |

MUS Renaissance Music Literature 3
8546/MUS
4540
ENGL 8200 Seminar: Middle English Literature 3
ENGL 8250
ENGL 8300
ENGL
8316/ENGL
4310
ENGL
8326/ENGL
4320
ENGL
8336/ENGL
4330
ENGL
8346/ENGL
4340
ENGL Shakespeare's Contemporaries

ENGL Seventeenth Century Literature 3
8366/ENGL
4360
ENGL 8396
ENGL 8400 Seminar: English Renaissance
ENGL 8450 Seminar: John Milton
ENGL
8626/ENGL
4620
HIST 8516

HIST
8536/HIST
4530
HIST
8546/HIST
4540
HIST Tudor and Stuart England 3
8616/HIST
4610
NOTE: The preceding list does not include the various departmental numbers for Graduate Directed Readings courses, even though these highly individualized reading and research classes may be applied to the requirements for the Minor. This list also does not include the various Special Topics courses in individual departments which may be taken for graduate credit.

MUSIC MINOR
(9 hours)
REQUIREMENTS

| Required Course (3 hours): |  |  |
| :--- | :--- | :--- |
| MUS 8150 | Applied Music | 3 |
| Music Literature or Theory (3 hours) to be selected |  |  |
| from: |  | 3 |
| MUS 8406 | Advanced Composition | 3 |
| MUS 8446 | Music Since 1945 | 3 |
| MUS | Advanced Orchestration |  |
| 8456/MUS |  | 3 |
| 4450 |  |  |
| MUS | Counterpoint | 3 |
| 8476/MUS |  |  |
| 4470 |  |  |
| MUS | Renaissance Music Literature |  |
| 8546/MUS |  | 3 |
| 4540 |  |  |
| MUS | Baroque Music Literature |  |
| 8556/MUS |  | 3 |
| 4550 |  |  |
| MUS | Classical Music Literature |  |
| 8566/MUS |  |  |


| 4560 |  | 3 |
| :--- | :--- | :--- |
| MUS | Romantic Music Literature | 3 |
| $8576 /$ MUS |  | 3 |
| 4570 |  |  |
| MUS | Music from 1900-1945 |  |
| 8586/MUS |  |  |
| 4580 |  |  |
| MUS 8460 | Music Analysis for Performance | 3 |

## Electives in Music (3 hours)

The elective is approved by the Graduate advisor during the advising process.

## PHILOSOPHY MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.
Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## PHYSICS MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## POLITICAL SCIENCE MINOR

## (9 hours)

## REQUIREMENTS

## Courses

PSCI 8040 Seminar in American Government 3

PSCI 8250 Seminar in Global Politics 3
PSCI 8300 Seminar in Political Theory 3

## RELIGION MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## SPANISH MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.

The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.
Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## WOMEN'S STUDIES MINOR

A student is not required by the graduate faculty to have a minor. However, a student may elect a minor with permission of the major department/school and the minor department/school.
The minor must consist of no fewer than nine graduate hours. The courses must be included on the Change in Plan
of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## GRADUATE FACULTY

## Accounting Faculty

- Jack Armitage
- Jennifer Blaskovich
- Xiaoyan Cheng
- Susan Eldridge
- Richard File
- Burch Kealey
- Wikil Kwak
- Roopa Venkaresch
- Timothy Yoder


## Art/Art History Faculty

- Larry Bradshaw
- Gary Day
- David Helm
- Amy Morris
- Bonnie O’Connell
- Joanne Sowell


## Biology Faculty

- Ann Antlfinger
- Lisa Boucher
- Thomas Bragg
- Bruce Chase
- Paul Davis
- William deGraw
- Robert Egan
- James Fawcett
- Alan Kolok
- Guoqing Lu
- John McCarty
- Suzanne Moshier
- Claudia Rauter
- Donald Rowen
- Mark Schoenbeck
- Scott Snyder
- Richard Stasiak
- Pamela Steele
- William Tapprich
- James Wilson
- L. LaReesa Wolfenbarger


## Black Studies Faculty

- Omowale Akintunde
- Margaret Jones
- Zebulon Miletsky


## Chemistry Faculty

- James Carroll
- Joshua Darr
- Alan Gift
- James Hagen
- Jodi Kreiling
- Frederic Laquer
- Richard Lomneth
- Eric Manley
- Dana Richter-Egger
- Robert Smith
- Douglas Stack
- Edmund Tisko
- Haizhen Zhong


## Communication Faculty

- Chris Allen
- Gail Baker
- Shereen Bingham
- Robert Carlson
- Chin-Chung Chao
- Ana Cruz
- Karen Dwyer
- Michael Hilt
- Bruce Johansen
- Teresa Lamsam
- Lynnette Leonard
- Jeremy Lipschultz
- David Ogden
- Barbara Pickering
- Marshall Prisbell
- Hugh Reilly
- Cynthia Robinson
- Randall Rose
- Michael Sherer
- Deborah Smith-Howell
- Paige Toller
- Adam Tyma
- Sherrie Wilson


## Counseling Faculty

- Paul Barnes
- David Carter
- Scott Harrington


## Criminology and Criminal Justice Faculty

- Amy Anderson
- Candice Batton
- Jonathan Brauer
- Pauline Brennan
- Samantha Clinkinbeard
- John Crank
- Chris Eskridge
- Dennis Hoffman
- Lorine Hughes
- Colleen Kadleck
- Chris Marshall
- Robert Meier
- Lisa Sample
- Jukka Savolainen
- Peter Simi
- Marc Swatt
- William Wakefield

Computer Science Faculty

- Hesham Ali
- M.H. Azadmanesh
- Sanjukta Bhowmick
- Zhengxin Chen
- Parvathi Chundi
- Prithviraj Dasgupta
- Hassan Farhat
- Hai-Feng Guo
- Harvey Siy
- Mahadevan Subramaniam
- Stanley Wileman
- Victor Winter
- Jong-Hoon Youn
- Mansour Zand
- Qiuming Zhu


## Economics Faculty

- Donald Baum
- Catherine Co
- William Corcoran
- Christopher Decker
- Art Diamond
- Shuanglin Lin
- Jinlan Ni
- Steven Shultz
- Mark Wohar


## Educational Administration and Supervision Faculty

- Richard Christie
- Karen Hayes
- John W. Hill
- Kay Keiser
- Pelema Morrice
- Peter Smith
- Jeanne Surface
- Daniel Shipp


## English Faculty

- Nora Bacon
- David Boocker
- Judith Boss
- Frank Bramlett
- Tracy Bridgeford
- Lisabeth Buchelt
- Robert Darcy
- Kristin Girten
- Ramon Guerra
- Charles Johanningsmeier
- Tammie Kennedy
- Lisa Knopp
- Joan Latchaw
- Owen Mordaunt
- David Peterson
- John Price
- Barbara Robins


## Finance, Banking and Law Faculty

- Weiyu Guo
- Kathleen Henebry
- Darryll Lewis
- Olivier Maisondieu-Laforge
- Graham Mitenko
- Michael O’Hara
- Wei Rowe
- David Volkman


## Foreign Languages Faculty

- Melanie Bloom
- Ana Carballal
- Gwyneth Cliver
- Claudia Garcia
- Carolyn Gascoigne
- Tatyana Novikov
- Juliette Parnell
- Patrice Proulx
- Anita Saalfeld
- Steven Torres
- Maria Villamil


## Goodrich Faculty

- Michael Carroll
- Jerry Cederblom
- Judy Harrington
- Barbara Hewins-Maroney
- Imafedia Okhamafe
- Todd Richardson
- Troy Romero
- Pamela Smith


## Geography Faculty

- Stanley Bereitschaft
- Michael Bishop
- Rex Cammack
- Christina Dando
- George Engelmann
- Karen Falconer Al-Hindi
- Harmon Maher
- Petr Pavlinek
- Jeffrey Peake
- Michael Peterson
- Robert Shuster


## Gerontology Faculty

- Stanley DeViney
- Lyn Holley
- Christopher Kelly
- Kyle Kercher
- Karl Kosloski
- Julie Masters

History Faculty

- Maria Arbalaez
- Danielle Battisti
- Waitman Beorn
- Bruce Garver
- Moshe Gershovich
- John Grigg
- Charles King
- M. Jeanne Reames
- Mark Scherer
- Michael Tate
- Sharon Wood


## Health, Physical Education and

Recreation Faculty

- Kris Berg
- Daniel Blanke
- Jason Coleman
- Donald Greeg
- Jennifer Huberty
- Melanie McGrath
- Josie Metal-Corbin
- Sarah Myers
- John Noble
- Dustin Slivka
- Richard Stacy
- Nicholas Stergiou


## Information Systems and Quantitative Analysis Faculty

- Sidney Davis
- Donna Dufner
- Martina Greiner
- Dwight Haworth
- Deepak Khazanchi
- Lotfi Najjar
- Stacie Petter
- Leah Pietron
- Sadja Qureshi
- Yong Shi
- Paul VanVliet
- Kerry Ward
- Peter Wolcott
- Ilze Zigurs


## Interdisciplinary Informatics Faculty

- Dhundy Bastola
- Douglas Derrick
- Gert-Jan deVreede
- Kenneth Dick
- Ann Fruhling
- Robin Gandhi
- William Mahoney
- Abhishek Parakh


## Mathematics Faculty

- Mahboub Baccouch
- Griffith Elder
- Steve From
- Jack Heidel
- Angela Hodge
- John Konvalina
- Betty Love
- Mihaela Matache
- Valentin Matache
- Michael Matthews
- Janice Rech
- Jimmy Rogers
- Andrzej Roslanowski
- Vyacheslav Rykov
- Larry Stephens
- Andrew Swift
- Robert Todd
- Zhenyuan Wang

Marketing and Management Faculty

- Phani Tej Adidam
- Dale Eesley
- John Erickson
- John Hafer
- Lynn Harland
- Jonna Holland
- Ziaul Huq
- James R. Jones
- Tom Martin
- Patricia Meglich
- Rebecca Morris
- Robert Ottemann
- Amy Rodie
- Birud Sindhav


## Music Faculty

- Jeremy Baguyos
- W. Kenton Bales
- Christine Beard
- Melissa Berke
- Roger Foltz
- Matthew Harden
- James D. Johnson
- David Low
- Peter Madsen
- Tomm Roland
- James Saker
- Courtney Snyder


## Public Administration Faculty

- John Bartle
- Robert Blair
- Tara Bryan
- Carol Ebdon
- Angela Eikenberry
- Bryce Hoflund
- Dale Krane
- Kenneth Kriz
- Gary Marshall
- BJ Reed
- Christine Reed
- Russell Smith
- Arwiphawee Srithongrung
- Jay White
- Ethel Williams


## Public Administration/Aviation Faculty

- Dave Byers
- Patrick O'Neil


## Philosophy and Religion Faculty

- Rami Arav
- Paul Audi
- William Melanson
- William Blizek
- Andrew Newman
- Bridget Blomfield
- Michelle Desmarais


## Physics Faculty

- Jayaram Betanabhatla
- Aleksey Holloway
- Wai-Ning Mei
- Iulia Podariu
- Renat Sabiryanov
- Glenn Sowell
- Daniel Wilkins
- Vincent Woolf


## Political Science Faculty

- Randall Adkins
- Meredith Bacon
- Jonathan Benjamin-Alvarado
- Loree Bykerk
- Elizabeth Dahl
- Carson Holloway
- Ramazan Kilinc
- Paul Landow
- Jody Neathery-Castro
- Gregory Petrow


## Psychology Faculty

- Jessiline Anderson
- Joseph Brown
- Juan Casas
- Michael Cortese
- Jeffrey French
- Wayne Harrison
- Shelton Hendricks
- Lisa Kelly-Vance
- Brian McKevitt
- Roni Reiter-Palmon
- Brigette Ryalls
- Carey Ryan
- Jonathan Santo
- Lisa Scherer
- Suzanne Sollars
- Rosemary Strasser
- James M. Thomas
- Robert Woody


## Sociology and Anthropology Faculty

- Samantha Ammons
- Timi Barone
- Lourdes Gouveia
- Daniel Hawkins
- Jay Irwin
- Alan Osborn
- Olu Oyinlade
- Julie Pelton
- Mary Ann Powell
- Beth Ritter
- Thomas Sanchez


## Social Work Faculty

- Theresa Barron-McKeagney
- Kerry Beldin
- Christiana Bratiotis
- Ann Coyne
- Henry D’Souza
- Jeanette Harder
- Nancy Kelley-Gillespie
- Amanda Randall
- Karen Rolf
- Peter Szto
- Jane Woody


## Special Education Faculty

- John Christensen
- David Conway
- Julie Delkamiller
- Mary Friehe
- Elizabeth Leader-Janssen
- Tom Lorsbach
- Philip Nordness
- Mitzi Ritzman
- Kristine Swain
- Amy Teten


## Teacher Education Faculty

- Phyllis Adcock
- William Austin
- Kathy Danielson
- Lana Danielson
- Nancy Edick
- Sarah Edwards
- Neal Grandgenett
- Wilma Kuhlman
- Sheryl McGlamery
- M. Susan McWilliams
- Harrison Means
- Carol Mitchell
- Elliott Ostler
- Rebecca Pasco
- Sandra Rodriques-Arroyo
- Saundra Shillingstad (Wetig)
- Franklin Thompson
- Neal Topp


## Theatre Faculty

- D. Scott Glasser
- Robbie Jones
- Doug Paterson
- Cynthia Phaneuf
- Sharon Sobel
- Steven Williams


## Writer's Workshop Faculty

- Richard Duggin
- Art Homer
- Anna Monardo
- Lisa Sandin
- Miles Waggener


## REGISTRATION AND RECORDS

## Registration

All persons who attend classes at the University must have been admitted to the University; they are required to register and pay the established tuition and fees. The dates, times, locations and procedures for registration are listed each semester on the Registrar's office web page at http://www.ses.unomaha.edu/registrar/

## Designation of Full-Time Status

Full-time graduate students at the University of Nebraska shall be defined as those students enrolled for at least nine credit hours during an academic semester, whether or not the student holds a graduate assistantship.
Students enrolling for more than 12 hours must have the approval of the Dean for Graduate Studies. In some programs special permission may be granted to take more than 12 hours as a regular load. Students should consult with the department/school for provisions.

## Explanation of Graduate Credit Course Numbers

Courses available for graduate credit are those which have been approved by the UNO Graduate Faculty or its designee. Students will not be allowed to upgrade or retake courses previously taken for undergraduate credit so that they can be used for any purpose where graduate credit is required. Undergraduate courses cannot be used toward a graduate degree.

A numbering system is used to indicate the availability and level of courses for graduate credit, as follows:


Courses with these numbers are open to both undergraduate and graduate students. Only 8--5 and 8-6 receive graduate credit; it is expected that students enrolled for graduate credit will do work at a higher level than that which is expected of undergraduate students in the same course.


Courses with these numbers are normally restricted to graduate students only. At least one-half the hours of course work on a plan of study must be in courses normally restricted to graduate students only.

With special permission from the Dean for Graduate Studies, exceptional juniors and seniors may enroll in graduate courses.

## Identification Card - MavCard

Upon first registering at UNO, students must have their pictures taken in MavCard Services (in the Student Center) for your MavCard (Student ID Card). This card is expected to last the student's entire time at UNO and should be carried at all times. MavCards serve as identification for services in the Library, Bookstore, HPER building and other places on campus. Students may be required to show their MavCards before being served in any of these facilities. MavCards are not transferable, and use by anyone other than the student to whom the card issued is subject to disciplinary action. Lost cards may be replaced by contacting MavCard Services in the Milo Bail Student Center. A $\$ 10.00$ charge will be made for replacement cards.

Information about the UNO student identification card is available at http://mavcard.unomaha.edu/

## Credit/No Credit Option for Courses Offered for Graduate Credit

The UNO Graduate Faculty does not, in general, allow the Credit/No Credit option for courses offered for graduate credit. However, each Graduate Program Committee shall have the right to designate courses such as practica, independent studies or research courses on which this option could apply. Inquire in the Office of Graduate Studies about the availability of this option for specific courses.

The grade of "Credit" is interpreted to mean the equivalent of a grade of " B " ( 3.0 on a 4.0 scale) or better and is not considered in the calculation of grade point averages.

## Dropping Courses

Students cannot drop courses after the date identified in the academic calendar for that semester. Exceptions may be made when there are extenuating circumstances. Students requesting an exception must obtain the instructor's certification that work in progress was at the " B " ( 3.0 on a 4.0 scale) level or higher. Approval of the request must be obtained from the Dean of Graduate Studies before the request to drop is submitted to the Office of the Registrar.

Incomplete Grades
Purpose

The grade "Incomplete" ("I") is to be used by an instructor at the end of a term to designate incomplete work in a course. It should only be used when a student, due to extenuating circumstances (such as illness, military service, hardship or death in the immediate family), is unable to complete the requirements of the course in the term in which the student is registered for credit. An "Incomplete" should be only given if the student has already substantially completed the major requirements of the course. Each instructor must judge each situation as to whether an "I" is appropriate.

## Removal

Normally there is no time limit for graduate students to remove a grade of "Incomplete". However, the instructor does have the option of determining the requirements for completing the course and requisite date for removal of incompletes. It is helpful to have these requirements in writing to ensure there is no miscommunication between the instructor and student.

## Intercampus Enrollment

Graduate students within the University of Nebraska system who have been admitted to a graduate program of study at another UN campus may register for graduate courses at UNO by using an Intercampus Registration Form, which can be found on-line at:
https://intercampus.nebraska.edu/pre_inter_campus.aspx.

## Repeating a Graduate Course

A student, upon the consent of his or her advisor, may repeat a course in which he/she has previously received a grade of "C+" ( 2.33 on a 4.0 scale) or below. Both grades will appear on the transcript, but only the second grade will be counted in determining the grade point average.

## Auditing Courses Offered for Graduate Credit

In order to audit courses for graduate credit, students must be admitted to graduate studies. Permission of the adviser and approval of the instructor of the course should be obtained prior to registration. It is the instructor's prerogative to determine privileges, including examinations connected with the course. Students registered for credit may change to audit registration during the first 11 weeks of a semester or during the first half of a class if it runs longer or shorter than a semester.

## Readmission to Graduate Studies

A student who has not been enrolled as a graduate student at UNO for 4 years or more must apply as a new graduate student and submit the graduate application, the required non-refundable application fee, and all other required
credentials. Applicants cannot apply to the same certificate program once the certificate has been awarded.

## Permission for Undergraduates to Register for Graduate Credit

## Juniors at an Accredited Institution

Exceptional juniors at the University of Nebraska at Omaha who have obtained, in advance, the approval of their advisor, department chair, the course instructor of record, and the Dean of Graduate Studies may receive up to 12 hours of graduate credit for courses taken at the University of Nebraska at Omaha in addition to the courses necessary to complete their undergraduate work. Juniors are allowed to enroll only in courses designated $8---$. The student must have at least a 3.5 (on a 4.0 scale) average in the undergraduate major. Graduate course work taken prior to receipt of the baccalaureate degree may not always be accepted for transfer to other institutions as graduate work or for completion of degree requirements.

## Seniors at an Accredited Institution

Seniors at an accredited institution (including UNO) who have obtained, in advance, the approval of the appropriate campus Dean of Graduate Studies may receive up to 12 hours of graduate credit for courses taken at any campus of the University of Nebraska in addition to the courses necessary to complete their undergraduate work, provided that such credits are earned within the 12 months prior to receipt of the baccalaureate degree and that the student must have at least a "B" ( 3.0 on a 4.0 scale) average in the undergraduate major. Graduate course work taken prior to receipt of the baccalaureate degree may not always be accepted for transfer to other institutions as graduate work or for completion of degree requirements at UNO.

## Change of Program

Except for non-degree students, students are admitted to specified programs for specified objectives. Therefore students who wish to transfer to another department/school must complete a new graduate application and submit it with the required non-refundable application fee. The decision as to whether students will be accepted shall be left to the graduate program committee of the department/school in which they are seeking admission and to the Dean for Graduate Studies. Admission to a new program is not automatically granted.

If a currently enrolled graduate student is admitted to a graduate program prior to receipt of their final grades for the current semester, the program may reevaluate its admission decision, if the student receives a grade of C - or lower in any coursework (undergraduate or graduate) for that semester.

## Prohibition of Simultaneous Matriculation

Normally, no graduate student may be a degree-seeking student in more than one graduate program at the University of Nebraska, unless enrolled in an approved dual-degree program. Any exception must have prior approval of every graduate program committee and every campus Dean for Graduate Studies through which the programs are administratively assigned. When there is an approved simultaneous matriculation, the same course credit will not be accepted for more than one degree without prior approval of every graduate program committee and every campus Dean of Graduate Studies through which the programs are administratively assigned.

## Record Maintenance and Disposition

All records, including academic records from other institutions, become part of the official file and can neither be returned nor duplicated for any purpose. Students may wish to obtain an additional copy of their official credentials to keep in their possession for advisory purposes or for other personal requirements. Transcripts provided to the university in support of a graduate application will be maintained for two years if the student does not enroll in to program to which they applied.

## POLICIES GOVERNING GRADUATE STUDY

## Master's, Ed.S., and Certificate Programs

## Plan of Study

At the time of admission to a degree program, an individual plan of study, also called a degree audit, will be sent to the student with their official letter of admission from the Dean of Graduate Studies. This individual plan of study will list all requirements for the completion of the degree program. These requirements may include deficiency courses and other provisions of admission, as well as specific courses to be completed to graduate and comprehensive examinations, if applicable. Any deviations to this plan of study must be approved by the student's advisor, graduate program committee chair, and Dean of Graduate Studies by completing the Change in Plan of Study form. Upon approval, the student and department/school will be notified.

A "B" average ( 3.0 on a scale of 4.0 ) must be maintained in all graduate work taken as part of a degree program.

## Plan of Study Report

The plan of study report outlines the requirements to complete the degree program at UNO. The summary of credit toward graduation includes any credit completed at UNO, as well as any approved transfer credit which applies to requirements for the degree. Listed below are important things to keep in mind:

- Graduate Students should meet regularly with their advisors or with other department/school-approved advisors.
- Review the standard degree/certificate plan. Submit to the Office of Graduate Studies (EAB 203) any deviations on the Change in Plan of Study form with appropriate signatures.
- Concentrations and Minors: If including a concentration or minor in one's degree/certificate program, a Change in Plan of Study form must be submitted that includes this information. If one's degree/certificate program includes a thesis, nonthesis, or project option, the appropriate option must be selected on the form as well.
- Please note: provisions of admission are included in the plan of study report.
- Transfer Credits: Up to one-third of the coursework required for the degree/certificate may be accepted from a regionally accredited institution other than the University of Nebraska. All transfer
credit must have a grade of "B" (3.0) or better and be approved by the Dean of Graduate Studies on the Change in Plan of Study form.
- Graduate course requirement: At least one-half of the graduate course work required for the degree/certificate program must be restricted to graduate students only ( $8--0$ or $9--0$ ). No more than two 3--0/8--5 courses are allowed on a plan of study.
- BSAD courses $8110,8120,8130,8170$, and 8180 may not be used on any plan of study.
- ISQA $8010,8020,8040$, and 8050 may not be used on any plan of study.
- If completing a thesis, or thesis-equivalent project, or Ed.S. field project: Refer to the Guidelines for Preparing Theses, Thesis-Equivalent Projects, EdS Field Projects below for information pertaining to approval of a supervisory committee, proposal approval, formatting, and deadlines.
- Grade point average: Students must maintain an overall GPA of "B" (3.0) in all graduate course work taken as a part of their degree/certificate course of study. Grades of "C-" or below result in dismissal from Graduate Studies and may not be used on a graduate plan of study. If a student tre-registers for a course to improve his or her grade, he or she must work with the Registrar's Office to note this on his or her transcript.
- Time Limit: The degree, certificate, or Ed.S. program must be completed within ten consecutive calendar years. Coursework that is over 10 years old ( 30 consecutive terms) at the completion of the degree program (as defined by the plan of study and including any necessary comprehensive exams) cannot be used for a Master's or Ed.S. degree. The first day of class of the earliest course which appears on the student's plan of study is the beginning of the student's graduate education.


## Minor Field

A student is not required by the graduate faculty to have a minor. However, a student may elect to complete a minor with the permission of both the major department/school and the minor department/school.

The minor must consist of no fewer than nine (9) graduate hours. The courses must be included on the Change in Plan of Study form and the minor department must sign off on this form. The minor will be reflected on the student's transcript at the time of graduation.

Students who elect to complete a minor may be required to take a comprehensive examination over the minor field. This requirement will be at the discretion of the minor advisor. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor advisor, but falling within the limits established for all comprehensive examinations.

## Concentrations

A department/school may offer specialized areas of concentration of at least nine (9) hours to graduate students pursuing degrees in that department/school. The area of concentration must appear on the approved plan of study. The Registrar will identify this area of concentration on the student's transcript.

## Transfer of Graduate Credit

Approval of the transfer of graduate credit for course work taken at another regionally accredited university (including extension credit but not including correspondence courses) is made at the time a Change in Plan of Study form is submitted to the Office of Graduate Studies. Grades received in courses for transfer of credit must be the equivalent of "B" ( 3.0 on a scale of 4.0 ) or higher. Transfer of graduate credits from a course taken with a pass/fail option must be recommended by the relevant Graduate Program Committee, supported by a written evaluation from the instructor and approved by the Dean of Graduate Studies. All work accepted for transfer of credit must have been taken within the prescribed time limits for graduate degrees and is subject to restriction if previously used to satisfy requirements for another graduate degree.

The only course work from other institutions posted on the UNO transcript will be those used on the approved plan of study.

## Transfer of Credits Taken Outside the University of Nebraska

Up to one-third of the coursework required for a graduate degree program may be accepted from an accredited institution other than a unit of the University of Nebraska when the transfer is supported by the student's adviser and the appropriate Graduate Program Committee. Final approval will be made by the UNO Dean of Graduate Studies. All other policies regarding graduate programs will apply. An official transcript must be forwarded to the Office of Graduate Studies documenting that the course(s) were taken for graduate credit.

## Transfer of Credits Taken at the University of Nebraska

There are no a priori limits on the transfer and applicability of credits earned in one program of the University of Nebraska toward meeting degree requirements in another such program, except as they are used to earn distinct degrees. However, such credits must be individually
evaluated and approved by the appropriate Graduate Program Committee and campus Dean of Graduate Studies before they can actually be transferred. UNOmaha students who wish to take courses at the University of Nebraska-
Lincoln, the University of Nebraska Medical Center, or the University of Nebraska at Kearney for transfer of credit should complete the intercampus application process available at
https://intercampus.nebraska.edu/pre_inter_campus.aspx.

## Thesis

Master's Thesis, Thesis-Equivalent Project and Ed.S. Field Project Guide
A Master's Thesis, Thesis-Equivalent Project, or Ed.S. Field Project provides the opportunity for students to acquire first-hand experience in research or creative activities with the supervision of experienced faculty. A thesis or thesis-equivalent project is equivalent to six semester hours of credit. The Specialist in Education (Ed.S.) field project is equivalent to three semester hours of credit. Required course hours must be indicated on each student's plan of study.

Grades for a thesis, thesis-equivalent project, or Ed.S. field project are recorded on the permanent record after completion and approval by the department/school and the Office of Graduate Studies. For a thesis or thesisequivalent project, grades will be either " $S$ " for "Satisfactory" or "U" for "Unsatisfactory". A letter grade will be recorded for the Ed.S. field project.
The thesis, thesis-equivalent project, or Ed.S. field project is not considered to be a publication; thus, it may be published, in whole or in part, and either quoted or paraphrased by giving appropriate credit to the relevant department/school, the Graduate College, and the University of Nebraska at Omaha.

## Students must file a Proposed Supervisory Committee

 form(http://www.unomaha.edu/graduate/downloads/Supervisor y_committeeForm.pdf) and a Thesis Proposal

## Approval form

(http://www.unomaha.edu/graduate/downloads/Thesis_Pro posalapprovalForm.pdf) with the Office of Graduate Studies before initiating the thesis, thesis-equivalent project, or Ed.S. field project, at least one semester prior to the student's anticipated graduation date.

Thesis, Thesis-Equivalent Project, and Ed.S. Field Project (ETD) Submission Procedures
The Supervisory Committee guides the student in the conduct and development of the thesis, thesis-equivalent project, or Ed.S. field project and approves the final product. Typically, final recommendations from the supervisory committee or the Supervisory Committee

Chair are provided to the student at the time of the final oral examination, although details vary among departments/schools and individual faculty. Final approval of the ETD, in PDF format, is contingent upon approval by the supervisory committee and the Office of Graduate Studies.

## Procedures:

When the final PDF version of the thesis/project has been approved by the supervisory committee, the student must submit the following to the Office of Graduate Studies for the final administrative step in the approval process:

- One paper copy of the Abstract
- One paper copy of the Title Page
- Report on Completion of Degree form (http://www.unomaha.edu/graduate/downloads/Report \%20on\%20Completion\%20of\%20Degree\%20Form.pdf ), signed by the supervisory committee.

NOTE : If the thesis/project is to be held pending patent issuances, etc., the student must specify this at the time the PDF file is submitted to ProQuest (UMI).

An electronic version of the thesis, thesis-equivalent project, or Ed.S. field project (collectively referred to as ETDs) is required. An ETD is a document expressed in a format simultaneously suitable for machine archives and worldwide retrieval. Preparation of the ETD may be done using most word processor or document preparation systems that incorporate relevant multimedia objects.
The ETD has many benefits, including:

- More access to research, both on campus and worldwide
- Lower expense to authors as there are no paper costs
- Can provide a better presentation of the research than available in a traditional paper format

Students who wish to order bound copies may do so through ProQuest, or they may make other arrangements.
As part of the ETD submission, students' abstracts are published in UMI's Master's Theses or Dissertations Abstracts publications. Upon submission, the student authorizes ProQuest to produce copies of his or her work on demand for a fee. However, the student may request that UMI not distribute (or embargo) his or her ETD until further notice (up to two years). Some reasons for this include if there is a patent pending, the student's employer requires a review of the work, or a publishing agreement requires initial publication. The ETD will also be included in the ProQuest Dissertations and Theses Database (PQDT), which includes more than 2.3 million citations, of which 870,000 are available in PDF. Each submission includes an abstract, citation, a preview, and a PDF if available. About 3000 libraries subscribe to the PQDT.

After the documents are submitted to the Office of Graduate Studies, the student must upload the thesis/project to ProQuest. Instructions for the upload can be found at http://dissertation2.umi.com/unomaha/.
Be certain that the electronic version, in PDF format, is exactly as was approved by the supervisory committee. ETDs are to be checked for formatting, pagination, spelling, grammar, and typos by the student and the student's supervisory committee.

For help with conversion of files from word processing to PDF, see the Library staff. Since errors may occur when converting from a word processor file to a PDF file, it is essential that the student review the final version of the PDF.

NOTE: There is a fee to submit the ETD through ProQuest. The amount is noted on the website.
After successfully uploading the thesis/project, the Office of Graduate Studies will be notified electronically by ProQuest of the submission and asked to provide final approval. Final approval of the thesis/project will not be granted if the paper copy and the Report on Completion of Degree form are not already completed.

NOTE: These steps must be completed prior to the end of the day of the Graduate deadline, 12 working days prior to the commencement ceremony at the end of each semester.

Formatting Instructions:
http://www.unomaha.edu/graduate/thesis_format.php
Submission Instructions:
http://www.unomaha.edu/graduate/thesis_submit.php

## Double Major, Dual-Degree Programs and Second Master's Degrees

## Master's Degree with a Double Major

The professional/scholastic goals of some master's students may be enhanced substantially by acquiring more knowledge of a second field than is currently provided by the option of earning a minor, yet they may not need a dual degree (i.e., two masters degrees in separate majors, typically 60+ credit hours). The UNO Graduate Council has approved the concept of providing master's degree students with the option of attaining a double major within the same degree (e.g., Master of Arts with two different majors). For instance, a student may be permitted, with proper approvals, to pursue a Master of Arts degree in the majors of history and geography because these majors both lead to the Master of Arts degree. One cannot attain a double major in history and biology because these majors lead to the Master of Arts and the Master of Science degrees, respectively.

- Students must submit two separate applications with one application fee. An email must then be sent to
graduate@unomaha.edu, clearly specifying that the student is seeking a double major, which department/school is to consider the application first, and if support from both of the departments/schools is being sought.
- The graduate committee of the first department/school will pass the application to the second graduate committee with the results of its decisions (recommendation for acceptance with support, recommendation for acceptance without support, refusal of admission).
- The prospective student should be aware that a decision to recommend admission by one of the graduate committees does not affect the decision of the other. The criteria for acceptance may differ between programs; admission to one or both of the department's/school's programs does not guarantee acceptance for a double major master's degree.
- Final approval of all applicants rests with the Dean of Graduate Studies. If one major is approved and one denied, the student must submit another application with an additional $\$ 45$ application fee to apply to another major.

Students accepted to a double major must meet, at least, the minimum requirements for each of the majors:

- Course work of no less than 18 credit hours in each of the two disciplines
- Courses cross-listed in both majors may only be counted once.
- The precise number of credits may vary depending on the total required hours for a particular major.
- For each of the two majors, students must take at least nine credits in courses open only to graduate students (8000- or $9000-l e v e l$ ), excluding thesis hours.
- The student is required to successfully satisfy the thesis/comprehensive examination or equivalent requirements for each major. In the event that both programs have a thesis requirement, either:
- Two theses may be written or
- The content of the thesis may reflect the content of both majors.
- If a joint thesis is elected, the thesis committee shall then consist of two graduate faculty members from each of the major departments/schools and shall be cochaired by a faculty member from each of the major departments/schools.
- If a student is already pursuing a major in a degree program, then decides he or she would like to obtain a second major, a new application and admission fee is required. The new application must be approved by the
original graduate committee prior to review by the second graduate committee. However, once the master's degree is conferred, a second major cannot be attained. Students would then be required to apply for admission to a second master's degree program, and upon acceptance, complete all requirements of a full, independent program.


## Dual-Degree Programs

Dual-degree programs must be approved by the Graduate Council and Dean of Graduate Studies. Dual-degree programs are a specifically approved combination of two Master's degree programs as distinguished from a master's degree with a double major (e.g., Master of Arts in English and History).

## Second Master's Degree

Use of graduate credit earned for the first degree will be treated in the same manner as transfer credit from another institution if applied to the requirements for the second degree. Up to one-third of the course work required for the second master's degree may consist of courses from a previous graduate degree. All other policies regarding graduate programs apply.

## Doctoral Programs

## Supervisory Committee

In order to assure that students are under careful advisement and mentoring throughout their careers, a Supervisory Committee must be established before a doctoral student begins the last 45 credit hours of their program of study. The supervisory committee is appointed by the Dean of Graduate Studies, based upon the recommendation of the Graduate Program Committee in the student's major prior to the approval of the program of study. The establishment of a supervisory committee is based on the student's demonstrated ability in the fundamental subject matter of his/her major field and professional promise.

The supervisory committee consists of at least four Graduate Faculty members, one of whom must be from outside the student's academic department/school or area in which the doctorate is to be granted. The chair of the supervisory committee must be a member of the Graduate Faculty. In addition to the minimum requirement of four Graduate Faculty members, other eligible persons may be recommended by the Graduate Program Committee for appointment by the Dean to the supervisory committee, provided at least two-thirds of the membership of each committee is Graduate Faculty.

## Changes to the Supervisory Committee

Any changes to the supervisory committee after initial approval must be submitted via a new Supervisory

Committee form and submitted to the Office of Graduate Studies for approval by the Dean of Graduate Studies.

If the chair of a supervisory committee leaves the employ of the University, or retires, the Office of Graduate Studies must be notified immediately and a change in the supervisory committee as follows:

- If the student has already achieved Candidacy, the former chair who has left the employ of the University may be permitted to continue as co-chair of the supervisory committee, with the agreement of the departmental/school Graduate Program Committee and the Dean of Graduate Studies. A second co-chair must be appointed who is a resident Graduate Faculty member.
- If the student has not yet achieved Candidacy, a new chair of the supervisory committee who is a resident Graduate Faculty member must be appointed immediately, with the agreement of the departmental/school Graduate Program Committee and the Dean of Graduate Studies.
- If a member of the supervisory committee other than the chair leaves the employ of the University, or retires, a replacement should normally be appointed who is a resident Graduate Faculty member. In certain circumstances where a special and needed continuing expertise is involved and the staff member is willing to continue serving, he/she may continue as a member of the supervisory committee, with the approval of the departmental/school Graduate Program Committee and the Dean of Graduate Studies.


## Program of Study

Within the same semester of its appointment, the supervisory committee will meet to designate and subsequently file in the Office of Graduate Studies a complete program of studies, including any language or research tool requirements (if applicable), and the reading committee. The reading committee consists of two members from the supervisory committee, excluding the chair of the committee.

Generally, courses taken before admission to the doctoral program cannot be included in the Doctoral Requirements section of the program of study form. At least 45 hours of the student's doctoral course work is to be completed after the approval of the program of study by the Dean of Graduate Studies. Any subsequent change in the program must be approved by the supervisory committee and the Dean of Graduate Studies.

The minimum amount of graduate credit for the Ph.D. is 90 semester hours, including a dissertation. The Ph.D. dissertation will normally account for 20 semester hours; however, the Information Technology dissertation requires a minimum of 24 semester hours. The minimum number of graduate credit for the Ed.D. is 96 semester hours,
including the dissertation, which normally accounts for 12 semester hours.

## Residency

A residency requirement has been established for the purpose of ensuring that the doctoral program be reasonably compact, continuous, and coherent; and that a substantial portion be done at and under the close supervision of the university. The residency requirement is part of the student's approved program.

In exceptional circumstances, where it is clear that the purpose of residency being fulfilled although the formal conditions is not met, the student's supervisory committee may, with the approval of the Dean of Graduate Studies, designate an alternative procedure for satisfying the residency requirement.

## Requirements for Ph.D. in Criminology and Criminal Justice, Ph.D. in Information Technology, Ph.D. in Psychology and Ph.D. in Exercise Science

- For a student beginning a doctoral program in the University of Nebraska system with a bachelor's degree, the residency requirement for the PhD is 27 hours of graduate work within a consecutive 18 -month period or less, with the further provision that 15 of these hours must be taken after receiving the master's degree or equivalent.
- For a student who transfers to the University of Nebraska system with a master's degree from another institution, or who takes a break in his/her graduate work between the time the master's degree is awarded and the time he/she starts work on a doctoral program, the residency requirement for the $\mathrm{Ph} . \mathrm{D}$. is 27 hours of graduate work in a consecutive 18-month period or less.
- For a member of the University staff who is engaged at least half-time in instruction or research in his/her major area, or a person employed in his/her major field, the residency requirement is 24 hours of graduate work within a consecutive two-year period with the further provision he/she take at least 12 of these hours after receiving the master's degree or its equivalent.
- Not more than one-third of the work for residency, or nine credit hours, may be taken during the summer sessions.


## Requirements for the Ph.D. in Public Administration and Ed.D. degree

- The residency requirement for doctoral students in Educational Administration and Public Administration is 24 hours in 24 consecutive months. The supervisory committee may determine how many of the required residency hours may be taken during the summer sessions.


## Time Limit for Completion of Degree

A minimum of three full years of graduate study is normally required to complete a program for the degrees Doctor of Philosophy and Doctor of Education. The time limit on granting the Ph.D. or Ed.D. degree is ten years from the time of filing the student's program of study in the Office of Graduate Studies. Individual programs may have other deadlines for completion. Neither the courses taken nor the time spent in study determines the granting of the degree. It is given primarily for high attainment in some special field of scholarship and for demonstrated power of independent research in a subdivision of this field.

## Comprehensive Examination

 Ph.D.When a student has substantially completed studies in the program, he/she must pass a written comprehensive examination. The written comprehensive examination is not a repetition of course examinations; rather, it is an investigation of the student's breadth of understanding of the field of knowledge of which his/her special subject is a part. The student will also be required to pass an oral comprehensive examination.

The supervisory committee arranges for written or oral examinations. As soon as possible after passing those examinations, the committee convenes and reports to the Office of Graduate Studies the results of those examinations and the specific area of research for the dissertation and progress to date by submitting the Application for Candidacy. Should the student fail the comprehensive examination or a part thereof, he or she may be allowed to re-take it during the following academic term upon specific recommendation by the supervisory committee.

## Ed.D.

When the applicant's program of coursework is substantially completed, comprehensive examinations that cover the appropriate field of study and related subjects will be administered. These examinations will thoroughly test for an understanding of the field of knowledge designated by the student. If an applicant fails the comprehensive examination, another attempt to pass such examination may not be made in the same academic term.

## Admission to Candidacy

When the doctoral student has passed the comprehensive examination, the supervisory committee will recommend to the Office of Graduate Studies his/her admission to Candidacy for the doctoral degree, noting in that recommendation the dates upon which the comprehensive examination was completed. This report must be filed at least seven months prior to the final oral examination. If
the term of Candidacy is extended beyond three years (excluding summer terms), the Candidate must pass another comprehensive examination. Following admission to Candidacy, the student must register during each academic year semester until he/she receives the Ph.D. or Ed.D. degree. Students not in residence may register for a minimum of one semester credit in dissertation. Failure to register during each academic year semester will result in termination of Candidacy.

## Final Examination

The final examination is oral. It is given by the supervisory committee after the Candidate's studies have been completed and the dissertation has been accepted for examination. The committee also determines its character and length. The examination may be devoted to the special field of the dissertation or to the Candidate's general knowledge, or it may be designed to test judgment and critical powers.

The final oral examination will not be scheduled unless the chair of the supervisory committee and at least two other members of the committee are available for the examination. Exceptions may be made only by permission of the Dean of Graduate Studies. In any event, the supervisor and readers of the dissertation must have seen and approved the completed dissertation before the final oral examination will be scheduled.

The final oral examination over the dissertation may be waived only with the unanimous consent of the supervisory committee and only in extremely unusual circumstances. The committee reports the results of the final oral examination or the reason for its waiver to the Office of Graduate Studies by using the Report on Completion of Degree form.
In the event that members of an oral examining committee are not unanimous regarding the passing of a Candidate, the student is to be approved for the degree only if one examiner dissents. However, in each case, the dissenting member of the committee will be expected to file a letter of explanation to the Office of Graduate Studies.

## Dissertation

The Doctoral Dissertation should make a creative contribution to knowledge in your field while also demonstrating mastery of relevant resources and methods. It is expected the dissertation will have a single topic, however broadly defined, and all parts of the dissertation will be interrelated. This, however, does not prevent sections of the dissertations from being discrete units.

The dissertation also should demonstrate your potential to make future, original contributions to knowledge, understanding, or methodologies in your discipline. For example, the originality of a dissertation may involve the discovery of significant new information or principles of
organization, the achievement of a new synthesis, the development of new methods or theories, or the application of established methods to new materials or procedures.

Given the diverse nature of the fields in which dissertations are written and the wide variety of topics that are explored, it is impossible to designate an ideal length for the dissertation. A long dissertation is not necessarily better than a shorter one since the value and scale of the dissertation topic ultimately depends on the quality of its thought and the clarity of its exposition. Your dissertation supervisory committee will determine the appropriateness of these and other issues.

Grades for a doctoral dissertation are recorded on the permanent record after completion and approval by the department / school and the Office of Graduate Studies. Grades will be either "S" for satisfactory or "U" for unsatisfactory.
The dissertation is not considered to be a publication thus it may be published, in whole or in part, and either quoted or paraphrased, by giving appropriate credit to the relevant Department/School, the Graduate College, and the University of Nebraska at Omaha.

NOTE: The doctoral supervisory committee guides your progress toward the completion of the dissertation, but it is your responsibility to follow instructions on the preparation of the document and to observe filing deadlines.

## Dissertation Submission Procedures:

The Doctoral Supervisory Committee guides the student in the conduct and development of the dissertation and approves the final product. Typically, final recommendations from the supervisory committee, or Supervisory Committee Chair, are provided to the student at the time of the final oral examination, although details vary among department/schools and individual faculty. Final approval of the dissertation is contingent upon approval by the supervisory committee and the Office of Graduate Studies.

## Procedures:

At least three weeks prior to the last published date for holding oral exams, bring the following to the Office of Graduate Studies:

- Application for Final Oral Examination or Waiver
- One copy of each of the Abstract and the Title Page of the dissertation. If the Final Oral Examination is waived, these documents must be presented to the Office of Graduate Studies at least three weeks prior to the last published date for holding oral examinations.
When the final dissertation has been approved by the supervisory committee, the student must submit hardcopies
of the following to the Office of Graduate Studies for the final, administrative step in the approval process:
- One paper copy of the final Abstract and Title Page
- Report on Completion of Degree form, signed by supervisory committee
- Completed Survey of Earned Doctorates form.
- NOTE:- Mac users should open the form in Adobe Acrobat and use the "save via email" link at the bottom.

NOTE: If the dissertation is to be held pending patent issuance, etc., the student must specify this at the time the PDF file is submitted to ProQuest.
After the documents are submitted to the Office of Graduate Studies, the student must upload their dissertation to ProQuest. Instructions for the upload at http://dissertations2.umi.com/unomaha/
Be certain the electronic version, in PDF format is exactly as was approved by the Supervisory Committee. ETDs are to be checked for formatting, pagination, spelling, grammar, and typos by the student and the student's Supervisory Committee.

For help with conversion of files from word processing to PDF, see the Library staff (presently, Matt Fenner, mfenner@mail.unomaha.edu) whom is available to assist you.

Since errors may occur when converting from a word processor file to a PDF file, it is essential the student review the final version of the PDF file.
PLEASE NOTE: There is a fee to submit the dissertation through ProQuest. The amounts are noted on their website.

After successfully uploading the dissertation, The Office of Graduate Studies will be notified electronically by ProQuest of the submission and asked to provide final approval. Final approval of the dissertation will not be granted if steps 1-4 above are not completed.

Note: these steps must be completed prior to the end of the day of the Graduate Studies deadline which is 12 working days prior to the commencement ceremony.

Formatting Instructions:
http://www.unomaha.edu/graduate/thesis_format.php
Submission Instructions:
http://www.unomaha.edu/graduate/thesis_submit.php

## Policies Governing Graduate Student Responsibilities

## Quality of Work Standards

A "B" (3.0 on a 4.0 scale) average must be maintained in all graduate work taken as part of the degree or certificate program.

## Automatic Dismissal

Graduate students are expected to do work of high caliber. Failure to do so will result in dismissal. In particular, the following will result in automatic dismissal from the degree or certificate program:

- Receiving a grade of "C-" (1.67 on a 4.0 scale) or below in any course taken in the student's major field of study or in any course included in the plan of study/program of study.
- Departments/schools may have additional and more stringent criteria for evaluating a student's performance and progress and may demand a higher level of performance than that demanded by the Graduate College. A department/school or program unit may, under some circumstances, recommend dismissal of a student from a graduate program even though quality of work standards have been maintained. Grounds for dismissal could include, but are not limited to:
- Failure to be accepted by an appropriate thesis or dissertation adviser within stipulated time limitations;
- Failure to make timely progress toward the degree or certificate; and
- Failure to perform in course work, qualifying examination or research at an acceptable level in the respective department/school or program unit.


## Probation or Dismissal

A department/school will recommend that the Dean of Graduate Studies either dismiss a student or place him or her on probation (with conditions for reinstatement as a student in good standing), in the following cases:

- A Grade of "C+" (2.33 on a 4.0 scale) or below in any course involved in the first 12 hours of graduate study for provisionally admitted students;
- Receiving at least nine (9) hours of graduate credit with the grade of "C+" ( 2.33 on a 4.0 scale) or below in any courses taken in the student's major field of study or in any courses included in the plan of study for master's degrees, specialist's degrees or graduate certificates, regardless of the average;
- Receiving at least six (6) hours of graduate credit with the grade of "C+" (2.33 on a 4.0 scale) or below in any
courses taken in the student's major field of study or in any courses included in the program of study for doctoral degrees, regardless of the average;
- Failure to maintain a "B" ( 3.0 on a 4.0 scale) average in all graduate work taken as part of the degree or certificate program.


## Unclassified and Non-degree Students

- For students with unclassified or non-degree admission, the above quality of work standards apply to course work taken, just as if all such courses were included in a graduate plan of study.
- A student will be automatically dismissed from all graduate standing or placed on probation should any of the above conditions occur.


## Additional Requirements

Some departments/schools apply additional criteria for satisfactory performance beyond the requirements of the Graduate College. A copy of each department's/school's policy is on file in the Office of Graduate Studies and a copy distributed to every graduate student enrolled in the program.

## Monitoring

- The Graduate Program Committees or the Supervisory Committees in their respective departments/schools shall be responsible for monitoring quality of work in degree, certificate and unclassified programs and for recommending action.
- The Office of Graduate Studies will send a report to each department/school at the start of each semester with the names of students who have received at least nine (9) hours of graduate credit with a grade of "C+" ( 2.33 on a 4.0 scale) or below as of the end of the previous semester.
- The Office of Graduate Studies will send a report to each department/school at the start of each semester with the names of doctoral students who have received at least six (6) hours of graduate credit with a grade of "C+" ( 2.33 on a 4.0 scale) or below as of the end of the previous semester.
- The Office of Graduate Studies shall be responsible for monitoring quality of work in non-degree programs.
- The Dean of Graduate Studies will make the final decision and notify graduate students of their status.


## Student Responsibilities

- Students should be aware of the Quality of Work Standards of the Graduate College, as well as any additional criteria of satisfactory performance in their respective department/school programs.
- It is the student's responsibility to know when his or her previous course work has failed to meet those standards.
- Students who are attending classes are still subject to dismissal if their department/school recommends that action based on its review of their previous performance.


## Automatic Dismissal for a Grade of "U" (Unsatisfactory) or "Fail"

A grade of "U" or "Fail" in any graduate course taken by a graduate student shall be treated the same as for a grade of "C-" or below and shall result in automatic dismissal from the graduate program.

## The Plan of Study and Grades Which Result in Automatic Dismissal

Grades which result in automatic dismissal from a program (e.g., grade of "C-" or below, "U", "Fail") may not be applied towards a graduate plan of study.

## Students Dismissed from a Graduate Program Who then Re-apply as Non-degree Students

Students will be placed on stop enrollment for the department/school from which they were dismissed unless they request and receive permission in accordance with departmental/school graduate program policy to enroll as a non-degree student in that program.

## Policy on Petitioning for Reinstatement into a Graduate Program

The process for petitioning and evaluating petitions for reinstatement into a graduate program is the responsibility of each department's/school's Graduate Program Committee. For a current copy of procedures, please contact your department/school Graduate Program Committee Chair.

## Plagiarism

The prevention of plagiarism and the imposition of sanctions upon those who resort to plagiarism are necessary in any university that espouses the ideals embodied in the concept of academic freedom. Plagiarism is the appropriation of the work (be it ideas or words) of another without crediting the source. Such a practice is particularly reprehensible in a community dedicated to the pursuit and advancement of knowledge.

## Plagiarism by Students

The investigation of allegations of plagiarism by a student or appeals therefrom, at any major administrative unit of the University of Nebraska, shall be carried out under the
appropriate faculty-student appeals committee at that campus. Please refer to the General Appeals Procedures.

## Ethical Conduct

It should be understood that academic performance is not the only criterion for graduation. Students are expected to maintain the highest standards of ethical conduct pertaining to academic coursework, professional practice and research activity. Any breach in ethical conduct shall be subject to disciplinary action, regardless of the student's prior or current academic performance.

## Appeals

## Appeal of Grades in Graduate-Level Courses

An appeal of grades in graduate-level courses shall be made through the graduate student grade appeal procedures for the campus through which the grade was awarded. Students who believe their evaluation in a course has been prejudiced or capricious must first attempt to resolve the matter with the course instructor and then the department through which the course was offered.
The initiation of the appeal in writing by the student must be filed within six weeks following receipt of the grade from the Office of the Registrar.
In cases where a grade lower than a " C " will result in dismissal from the graduate student's program, the Dean of Graduate Studies will notify the Graduate Program Committee Chair and student that the student will be automatically dismissed from his/her graduate program. The student will have a two-week grace period from the date of the dismissal notification to the date of the request to the Registrar for disenrollment in all graduate coursework. This two-week period allows the student an opportunity to present his/her case informally to the course instructor and, if necessary, to the chair of the graduate program committee before being terminated from the program and dis-enrolled from courses. A student who has been dismissed from a graduate program and dis-enrolled from coursework may still file a formal appeal to the campus Dean of Graduate Studies, but is no longer a student in good standing and is prohibited from taking graduate courses until the formal appeal has been resolved.
If the matter is not resolved, the student may file an appeal in writing to the campus Dean of Graduate Studies, who shall inform the student of the grade appeal procedures approved by the Graduate Faculty or by their duly elected representative Graduate Council for that campus, and shall forward the appeal to the student-faculty committee or council that has been designated to hear graduate-level course grade appeals on that campus. Since awarding grades in courses occurs at the individual campus level, the decision of the campus committee or council designated to
hear the case on behalf of the campus Graduate Faculty shall be final and is not subject to further appeal.

## Appeal of General Academic Matters Related to Student Programs

1. Graduate students holding admission with Unclassified status in the Graduate College, admission with a master's objective or admission with a doctoral objective (but prior to the appointment of a doctoral supervisory committee) should appeal as follows: Initially, the appeal may be submitted to the student's adviser.
If denied, the appeal may be submitted to the department/area Graduate Program Committee administratively responsible for the student's graduate program.
If denied, an appeal may be made to the Graduate Council for the campus administratively responsible for the student's graduate program. Normally, this is the final appeals body (for exceptions, see the last part of this section).
2. Graduate students holding admission with a doctoral objective in the Graduate College and for whom a doctoral supervisory committee has been appointed should appeal as follows:
Initially, the appeal should be submitted to the student's adviser.
If denied, the appeal may be submitted to the student's supervisory committee.
If denied, the appeal may be submitted to the department/area Graduate Program Committee administratively responsible for the student's graduate program.
If denied, an appeal may be made to the Graduate Council for the campus administratively responsible for the student's graduate program. Normally, this is the final appeals body (for exceptions, see the last part of this section).
3. When a student's graduate program consists of registrations essentially or entirely on one campus, the Graduate Council of the campus administratively responsible for the program will constitute the appeal board. When a student's graduate program includes substantial registrations on a campus other than the one administratively responsible for the program, three members of the Graduate Council for the other campus will be designated by the Dean of Graduate Studies on that campus to augment the Graduate Council on the campus administratively responsible for the program. In this case, the augmented Council will constitute the appeal board. The decision concerning augmentation of a campus Graduate Council for a specific appeal involving registrations on a campus other than the one administratively responsible for the student's program
will be made by the Deans on Graduate Studies on the campuses involved.
4. In all cases, appeals should be made in writing to the appropriate adviser, committee or council. In those cases where the appeal concerns graduate-level qualifying exams, comprehensive exams or final oral exams, the following deadlines must be observed. It is the responsibility of the student to make reasonable efforts to ascertain the results of the examination within 30 days after its completion.
The initiation of the appeal, in writing, by the student must be filed within 30 days following the student's receipt of notification of the evaluation.
In those cases involving an appeal of termination of program, initiation of the appeal, in writing, by the student must be filed within 30 days following the student's receipt of the official written notification by the Office of Graduate Studies.
There is no absolute right of appeal to the Executive Graduate Council. The Executive Graduate Council will accept appeals only in those cases where, in the exercise of its sole discretion, it shall first find that one or more of the following grounds for accepting the appeal exist: That the campus Graduate Council has violated some element of fair procedure (example: has failed to allow the parties concerned to present their cases fully to their campus Graduate Council);
That the campus Graduate Council has failed to examine or give adequate weight to important evidence relevant to one party's position;
That the campus Graduate Council has given undue weight to evidence not pertinent to the case; or
That some gross miscarriage of justice would be perpetrated if the decision of the campus Graduate Council is allowed to stand. A decision by the Executive Graduate Council not to accept jurisdiction of an appeal shall be final and is not subject to further appeal.
Appeals to the Executive Graduate Council must be made in writing and must specifically outline the grounds for appeal. Such appeals must be made within 20 working days of the day on which the decision of the campus council is received (working days shall not include those days the University is not in session).
The Executive Graduate Council must make a decision to hear the appeal or not to hear the appeal within 30 working days after receipt of the appeal. Acceptance or denial of jurisdiction over the appeal will be made in writing. The decision of the Executive Graduate Council on the merits of the case will be made and transmitted to the concerned parties within 40 working days after the decision to hear the appeal.
No person who was a member of the department or campus graduate council involved in the case will be eligible to participate in the decisions of the Executive Graduate Council, either to decide whether the case should
be heard or to decide the merits of the case. However, the Dean of Graduate Studies may replace members of the Executive Graduate Council not eligible for participation in the decision to hear the appeal or in the appeal itself.

## Graduate Student Academic Appeal Policy

 IntroductionThis document outlines the UNO Graduate Council policies and procedures for student academic appeals in situations such as comprehensive exams, plagiarism, and reinstatements. For grade appeals, see the "Grade Appeal Policy at the Graduate College Level for Graduate-Level Courses."

This document is divided into three sections: 1) Documentation from Student and Faculty Representative (or Department) 2) a description of the initial review of the appeal case by the Graduate Student Academic Appeals Committee; and 3) details of the operating guidelines for the UNO Graduate Council to follow in conducting a full appeal.

### 1.0 Documentation from Student and from Faculty Representative

### 1.1 Student Documentation

The student shall provide documentation that proves the student's appeal. In addition to the documentation deemed relevant by the student to prove the student's appeal and provided by the student, the student shall complete a single-page cover sheet for the appeal. That cover sheet shall be designed by the Graduate Dean and provided to the student. On that cover sheet, in less than 2,000 characters (i.e., including spaces), the student shall specifically identify in three separate paragraphs:

1. the procedural error(s) being appealed;
2. the substantive error(s) being appealed; and
3. the remedy requested.

The student's appeal is not submitted until the Graduate Dean determines that the student's cover sheet has been completed as required.

### 1.2 Faculty Representative Documentation

The Graduate Dean shall deliver the student's section 1.1 cover sheet, along with other notice of the student's appeal, to the decision maker whose decision is being appealed. The decision maker shall promptly notify the Graduate Dean of the decision maker's appointment of a Faculty Representative.
Ordinarily the student's appeal is necessarily limited to an appeal of the decision of a single decision maker (e.g., graduate program committee). However, if the student is appealing decisions of more than one decision maker, then there might be more than one Faculty Representative. The

Faculty Representative of a committee may be, but is not necessarily, a member of that committee. If no such notice of appointment is delivered to the Graduate Dean, then the Faculty Representative of an individual decision maker shall be that individual, and for a committee the current chair of that committee.

The Faculty Representative shall provide documentation relevant to the student's appeal as defined in the student's section 1.1 cover sheet in a timely manner. After the student has submitted an appeal, and after the Faculty Representative has replied by providing relevant documentation, the Graduate Dean shall review that documentation for completeness. Prior to the Graduate Dean delivering that documentation to the Graduate Student Academic Appeals Committee, the Graduate Dean, in the interest of completeness, may request the Faculty Representative(s) to provide specific additional documentation that the Graduate Dean reasonably believes is readily available to the decision maker whose decision is being appealed.

### 2.0 Graduate Student Academic Appeals Committee

### 2.1 Function of the Committee

The Associate Vice Chancellor for Academic Affairs and Dean of Graduate Studies shall appoint a committee which will review student academic appeals that are filed in the Office of Graduate Studies. The task of the Graduate Student Academic Appeals Committee will be to determine whether the appeal merits a hearing by the Graduate Council.

### 2.2 Composition of the Committee

The Associate Vice Chancellor for Academic Affairs and Dean of Graduate Studies shall appoint two faculty members from each of the two standing committees of the Graduate Council, and one of the student representatives on the Graduate Council, to serve on the committee. The duration of appointment to the committee shall be for one year. (In cases where a student from the home department of one of the members of the committee has initiated an appeal, the Dean shall appoint a replacement for that committee member from the Graduate Council to hear that specific appeal. All other cases of potential conflict of interest shall be treated in a similar fashion).

### 2.3 Procedures for the Committee

The committee is charged with the responsibility of determining the merits of the student academic appeal, based on the letter of appeal and any other documentation requested and received by either the Dean of Graduate Studies or the Graduate Student Academic Appeals Committee. The committee shall vote on whether the appeal merits a hearing by the Graduate Council. Affirmative vote of the majority of the members is required to bring the appeal before the Graduate Council for a full hearing. The decision of the committee will be
communicated to the Office of Graduate Studies for appropriate action.

### 3.0 UNO Graduate Council and Graduate Student Academic Appeals

### 3.1 Purpose and Limitation of Scope

The Graduate Council will hear only those appeals forwarded by the Graduate Student Academic Appeals Committee. The purpose of the hearing shall be to decide the merit of a student's request for redress of the academic issue being appealed. The appealing student bears the burden of proof to prove: (1) by clear and convincing evidence that the faculty member's decision being appealed was prejudicial or capricious; and 2) by the preponderance of the evidence that the Graduate Program Committee's decision being appealed was prejudicial or capricious.

### 3.2 Composition of the Council for Hearing Student Appeals

The full membership of the Graduate Council (quorum required) shall hear academic appeals of graduate students.

### 3.3 Possible Conflicts of Interest by Graduate Council Members

Graduate Council members who feel a conflict of interest might result from their participation in an academic appeal hearing shall exercise the necessary professional steps to avoid influencing the vote of the Council.

### 3.4 Timeliness of Council Decision

The Graduate Council shall hear appeals forwarded by the Graduate Student Academic Appeals Committee at its next scheduled meeting unless a delay is approved.

### 3.5 Student and Faculty Freedom to Present Arguments

The student and the faculty representative shall have freedom to present their viewpoints, limited only to the requirement that facts and opinions presented shall pertain to the academic issue being appealed.

### 3.6 Guidelines for Hearing Procedures

The following shall be made known to persons present at the hearing:

The time: $\qquad$ The date: $\qquad$ The place:

[^1]appeal. The student disagreed with the decision of the departmental appeals committee and continued the appeal process by submitting a letter detailing supporting reasons to the Dean for later consideration by the Graduate Student Academic Appeals Committee. That committee reviewed the student's request on $\qquad$ and, under conformity with its guidelines, has forwarded the student's appeal to the Graduate Council for action. The Graduate Council members present at this hearing have had an opportunity to review the documents provided by the person(s) involved. The agenda for the UNO Graduate Student Academic Appeal is:
Student's presentation: 10 minutes
Faculty Representative's presentation: 10 minutes
Council Members' questions to Student and Faculty Representative: up to 20 minutes
Student's concluding remarks: 5 minutes
Faculty Member's concluding remarks: 5 minutes
The participants of this appeal shall leave following the above hearing and the Council will deliberate the issue(s) involved. The Council's decision will be determined by secret ballot of those members who were present and voted. As soon as the votes are counted by the Associate Vice Chancellor for Academic Affairs and Dean of Graduate Studies, the ballots shall be destroyed and the final decision announced to the Council by the Dean. In no case shall the number of votes cast on either side of the issue be disclosed.

### 3.7 Administration of the Council's Decision:

The Associate Vice Chancellor for Academic Affairs and Dean of Graduate Studies shall provide the parties of an appeal a written statement of the Graduate Council's decision within three working days.

## Grade Appeal Policy for UNO Graduate College Courses

## I. Overview

1. Purpose. A grade appeal policy seeks to articulate and protect both the rights of students to fair and impartial evaluation of their academic performance and the responsibilities of faculty members as those who determine student grades. A course grade assigned in a manner consistent with University policy can be changed only by the instructor. University administrators can direct a grade to be changed only when it is determined through the procedure established by this policy that the faculty member assigned the course grade in an arbitrary or capricious manner. An "arbitrary and capricious action" is an action taken without regard for the facts or circumstances of the appeal, without some basis which
would lead a reasonable, informed, and honest person to the same conclusion.
Allegations that sexual harassment was the reason a final course grade was arbitrarily or capriciously assigned by the instructor must be addressed according to procedures set forth in the UNO Prohibited Discrimination policy [www.unomaha.edu/discrimination.php] rather than from the following procedures.
2. Faculty Responsibility. It is a fundamental principle of higher education that faculty members are expected to:
Exercise their professional judgment in evaluating student performance.
Specify in each of their courses at the beginning of the academic term:
Course requirements and expectations for academic performance; and
Procedures for evaluating performance (method(s) of evaluation and grading scales).
Communicate clearly to all students in the course any subsequent additions to or changes in these requirements, standards, and procedures.
Apply the specified grading criteria equitably to the academic performance of all students in the course regardless of their age, color, creed, disability, gender, national origin, race, religion, sexual orientation, or other personal characteristics.
Departing faculty must document their last semester's grades and leave a copy with their Graduate Program Chair. Documentation should include course syllabi and any other information distributed to their students concerning grading policies.
3. Student Responsibility. Students have the responsibility to know and adhere to the University policies and standards pertaining to them. As students willingly accept the benefits of membership in the University of Nebraska at Omaha academic community, they are obligated to uphold and observe the principles and standards articulated in the UNO student code of conduct (www.unomaha.edu/academicaffairs/documents/scc.pd f).

## II. Course Grades that Are Eligible for Appeal

1. A grade appeal policy applies to final course grades. Course grades which result from alleged violations of the Code of Student Academic Integrity may also be appealed under this policy.
2. A course grade is deemed to have been assigned in an arbitrary or capricious manner if, by a preponderance of the evidence, a student establishes that:
3. The course grade was based upon the student's age, color, creed, disability, gender, national origin, race, religion, sexual orientation, other personal
characteristic, or for some other arbitrary or personal reason unrelated to the instructor's exercise of his or her professional academic judgment in the evaluation of the academic performance of the student; or
4. The course grade was assigned in a manner not consistent with the standards and procedures for evaluation established by the instructor, usually at the beginning of the course in the course outline, commonly called the course syllabus (a course outline is primarily the information provided by the instructor at the beginning of the course, and not necessarily the master syllabus generated by the department which may be applied to multiple offerings of a course in time or place), but supplemented on occasion during the semester in other written or oral communications directed to the class as a whole; or
5. The course grade assigned by the instructor was the result of a clear and material mistake in calculating or recording grades. Individual elements (e.g., assignments, tests, activities, projects) which contribute to a course grade are generally NOT subject to appeal or subsequent review during a grade appeals procedure. However, individual elements may be appealed under these procedures providing the following conditions are met:
a. The student presents compelling evidence that one or more individual elements were graded on arbitrary or capricious grounds (defined above);
b. Grounds can be established for determining a professionally sound grade for the appealed element(s); and
c. The ensuing grade for each appealed element would have resulted in a different course grade than that assigned by the faculty member.

## III. Grade Appeal Procedures

Each department or program will establish its own grade appeal procedures. These procedures must:

1. Articulate and protect both the rights of students for fair and impartial evaluation of their academic performance and the responsibilities of faculty members as those who determine student grades.
2. Include timelines.
3. Be made readily available to all students.
4. Be documented in the Office of Graduate Studies.

## SERVICES AND SUPPORT

*** Redirect Link ***
*** Identification-Card-MavCard-Services ***

## Graduate Student Travel

An essential part of every graduate program is learning to use the tools of research, both scholarly and applied. Graduate students seeking funding for a research project should first inquire whether their department or college has funds available for that purpose. Information on other sources such as the University Committee on Research \& Creative Activity and funding agencies exterior to the University can be obtained from the Office of Research \& Creative Activity, Eppley Administration Building 203. For travel support, contact Nicole Kersten via email at nkersten@unomaha.edu.

## Prep Week

The last week of regularly scheduled classes during fall and spring semesters is designated as Prep Week. Except for makeup examinations, tests in self-paced courses, posttests in the English Composition Program or laboratory exams, no major examination (accounting for more than 20 percent of a student's grade) may be given during this period.
Papers, projects or presentations assigned well in advance (at least two weeks) of Prep Week may be due during this period.

## Writing Center

The Writing Center invites UNO student, faculty, and staff in all university divisions to work with a writing consultant on any university-related writing project. You may use this free service to work on your writing assignments, application essays, business letters or other projects. Our goal is to help you become an effective, independent writer; we will not edit papers for you: instead we will help you develop the ability to edit your own work.

Since graduate-level essays are often lengthy, you may reserve an hour-long appointment instead of the standard half hour. You may wish to work with our Graduate Consultant, Kathy Radosta. Kathy works Tuesday and Thursday mornings; to schedule an appointment, call the Writing Center at 554-2946.

## Use of Human Subjects or Animals in Research

All campus research that involves the use of human subjects or animals must be reviewed and approved by the Institutional Review Board or the Animal Research

Committee, respectively. This policy applies to both funded and non-funded faculty and student research. Any individual research project that involves human subjects or animals must be approved by the appropriate committee prior to initiation of the research. For additional information, visit or contact the Office of Research and Creative Activity, Eppley Administration Building 203.

## Office of Disability Services

The Office of Disability Services is committed to providing an equal educational opportunity for enrolled or admitted students who have documented disabilities under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. The coordinator serves as the primary contact for students wishing to discuss eligibility, policies and procedures, services offered, and/or personal concerns. The coordinator is also available to help arrange services for qualified students with disabilities; i.e., reasonable academic adjustments, sign language interpreters, alternative print format, note takers, use of the Testing Center, assistive technology and more. Students must provide appropriate documentation regarding physical, emotional, learning, or other types of disabilities for consideration of services. Consultations with the coordinator may be scheduled at any time. For information, please call (402) 554-2872 or stop by the Disability Services office in the Eppley Administration Building, Room 117.

## Counseling Services

The UNO Counseling Center is dedicated to working with students to maximize their potential and meet the challenge of becoming whole, purposeful, thriving individuals. One's college years provide an exciting opportunity for inquiry, experimentation, productivity and self-discovery. We at the Counseling Center are eager to assist you in these pursuits.

The Center is staffed by licensed mental health practitioners and a graduate assistant. Each is committed to providing support and encouraging personal success in identifying and reaching your goals.

Services provided by the Center include short-term personal counseling, prevention, outreach education, academic counseling, and career counseling for all students, faculty and staff of the university. Difficult life circumstances, personal relationship concerns, balancing day-to-day responsibilities or similar issues may be addressed in counseling. Our mission is to provide you with a safe, confidential atmosphere in which personal concerns can be openly explored and discussed.

We are eager to help create a vibrant, safe campus community in which your psychological health and academic life flourish. Please feel free to call us at 402-554-2409 with any questions or concerns.

## Dr. C.C. and Mabel L. Criss Library

For information about the Dr. C.C. and Mabel L. Criss Library, please visit their website at http://library.unomaha.edu/information.php

## MavUSO

UNO has an office dedicated to military and veteran students called the Military \& Veteran University Services Office MaV USO). This is a one-stop office where military, veterans, and their family members can find services and programs at UNO tailored to their needs, such as online degree programs and a flexible deployment policy. Another benefit is that UNO is a Yellow Ribbon school, so veteran graduate students using the Post 9/11 GI Bill can have all of their cost fully covered in addition to receiving the basic housing allowance (BAH). In 2011, The Military Times named UNO as one of the nation's 10 best colleges for military veterans.
Please feel free to contact us at
Website: www.unomaha.edu/military
Facebook: www.facebook.com/UNOMAVUSO
E-mail Addresses: unovets@unomaha.edu for MaV USO on campus or unooffutt@unomaha.edu for Offutt

Phone Numbers: 4-2349 for MaV USO on campus, 1-855-MAV-USO1 for toll free, or 595-2371 for Offutt

## Testing Center

The UNO Testing Center provides a variety of services to UNO students, faculty and staff, and the greater Omaha community.
These services include UNO Placement Exams, national exams, testing to help determine career interests, abilities and personality, testing assistance for students with disabilities, Credit by Examination, and others.

Online test information may not include all test parameters, examinees can obtain additional printed information or clarification from the Testing Center located in Kayser Hall 522 or may be reached at 402-554-4800.

## Speech Center

The UNO Speech Center assists all UNO students, faculty, and staff in preparing oral presentations and/or incorporating them into their courses.

Speech Consulting Room provides consulting and coaching services for all UNO students, graduate students, faculty, and staff from all disciplines, assistance to faculty in support of Speaking Across the Curriculum effort at UNO and assessment documentation for the UNO oral communication general education requirement.

The Speech Center is located in Arts \& Science Hall 183 \& 185 or can be reached at 402-554-3201.

## Career Center

The Career Center team provides students and faculty with the opportunity to engage in specialized career development and educational experiences that will increase knowledge and awareness of employment

## GRADUATION \& COMMENCEMENT

As students prepare to graduate from UNO, there are several things they should know. Please check with the Office of Graduate Studies for specific deadlines, and review the following information and checklist. Please be aware of all relevant deadlines.

UNO students have the opportunity to graduate in May, August, or December, and the choice of participating in one of two commencement ceremonies held annually in May and December. Students graduating in May are eligible to participate in the May commencement ceremony, while students graduating in August and December are eligible to participate in the December commencement ceremony. Participation in a commencement ceremony is not required in order to graduate from any degree program or receive a diploma.
Deadlines to apply for graduation are included in the academic calendar.

- Students must complete an Application for Degree during the semester in which they plan to graduate. Log onto mavlink and fill out the application on or before the deadline.
- There is a \$35.00 Application for Degree Fee, payable at the time the application is submitted.
- After applying for the degree, students should visit the UNO Bookstore as soon as possible to order their caps and gowns and graduation announcements (if planning to participate in commencement). Deadlines to order various items will differ depending on the ceremony in which a student plans to participate. Please contact the Bookstore at (402) 554-2336 with any questions.
- Students have 15 working days after the commencement ceremony, (or 15 working days after the final day of the summer semester, in the case of August graduation) to complete all degree requirements in which they are currently enrolled for that semester. Diplomas will be mailed as soon as possible after the 15 working days have passed. Please be sure all holds are cleared and that the address listed on the degree application is correct, as this is the address to which diplomas are mailed.
- Please contact the Registrar's Office, (402) 554-2314, with any additional questions.


## Checklist for Graduation

Apply for the degree through mavlink on or before the deadline. Information can be found at http://www.ses.unomaha.edu/registrar/graduate.php

|  | Fall | Spring <br> $\mathbf{2 0 1 3}$ | Summer <br> $\mathbf{2 0 1 3}$ |
| :--- | :--- | :--- | :--- |
| Last day for filing an <br> application for degree | October <br> to be conferred | March | July 6 |
| Last day to submit <br> comprehensive | November | 29 | April | August 9 examination results, all incomplete grades from previous terms, and final copies of thesis, thesisequivalent projects, Eds field projects and dissertations

- If you apply for graduation and will not complete all of the requirements for the degree, please notify the Office of Graduate Studies. You must REAPPLY to graduate in a future term; no additional fee is charged.
- Order a cap, gown, and hood from the UNO Bookstore. Contact the Bookstore at (402) 554-2336 for deadlines.
- The following requirements must be in the Office of Graduate Studies 12 working days prior to commencement:
- Comprehensive Examination Results. (Contact individual Departments/Schools for procedures to take the exams).
- All incomplete grades from previous terms must be completed and the grades submitted to the Office of Graduate Studies.
- Submit thesis, thesis-equivalent project, EdS field project or dissertation.
- Your graduation file must be in complete order with the exception of grades for current enrollments. Final responsibility rests with you, the graduate student, to check with your advisor and the Office of Graduate Studies to be sure all requirements are met.NOTE: If the above items are not completed by this date, students will NOT be allowed to participate in the commencement ceremony.
- Pay all fees and fines and satisfy all obligations to the University.
- If you are currently enrolled in courses which are a part of your plan of study, you must maintain enrollment to be eligible for graduation. A grade for any current enrollment must be received by the Registrar's Office
no later than the close of business on the 15 th day following the date of commencement.


## GRADUATE COURSES

## ACCT - Accounting

## ACCT 8036 - Tax Issues for Decision-Making (3)

An introduction to the basic taxation principles for the nonaccountant. This course is designed to elevate the tax awareness of and to provide tax knowledge for future decision makers.

Prerequisite: ACCT 2020 or equivalent or BSAD 8110. Crosslisted as: ACCT 4030.

ACCT 8066 - Advanced Managerial Accounting (3)
A more intensive analysis of advanced managerial accounting techniques that helps managers plan and control in both the short and long run.

Prerequisite: ACCT 3050. Crosslisted as: ACCT 4060.

## ACCT 8096 - Information Systems Auditing (3)

This course will provide an introduction of auditing an advanced accounting information system. Content studied will include professional standards, guidelines, and procedures promulgated by the Information Systems Audit and Control Association. Accounting information systems control and security practices, and their assessment, will be discussed in the areas of operations, physical and logical access, systems, networks, development and applications, and incorporating hands-on exposure to automated evaluation tools.

Prerequisite: ACCT 4080 with a grade of C (2.0) or better. Crosslisted as: ACCT 4090.

## ACCT 8210 - Financial Accounting Theory (3)

The development of accounting, current accounting theory and present controversies and suggested theory and practice.
Prerequisite: ACCT 3040.

## ACCT 8220 - Graduate Topics in Income Taxation (3)

This course will discuss commonly encountered tax issues such as gift and estate taxation, income taxation of estates and trusts, and exempt organizations, as well discuss current events while introducing the student to practitioneroriented research publications.

Prerequisite: Admission to MAcc or MBA program or permission of instructor. ACCT 4040/8046 with a "C" (2.0) or better, or concurrent enrollment in ACCT 4040/8046. Not open to non-degree students.

## ACCT 8230 - Strategic and Operational Planning and Control (3)

An analysis of information to assist managers in determining successful strategies, developing those strategies into plans and controlling operating activities to achieve strategic goals.

Prerequisite: ACCT 3050 or BSAD 8200.
ACCT 8240 - Professional Problems (3)
Questions, problems and cases are used to develop and refine accounting analysis techniques and written communication abilities.

Prerequisite: LAWS 3230; ACCT 3020, 3050, 4010, 4080; and permission of instructor.

## ACCT 8250 - Seminar in Accounting (3)

A study of a specific area within the accounting discipline. Possible areas include: auditing, financial, managerial, systems and tax. May be repeated, but no area can be taken more than once.

Prerequisite: Admission to MAcc or MBA programs or permission of instructor.

## ACCT 8260 - Federal Tax Research and Planning (3)

This course is designed to provide students an opportunity to gain expertise in federal tax research methodology to solve both the routine and complex federal tax problems. Students will use the Internal Revenue Code and Regulations, case law and other primary authority, tax reporter services, and computer research tools.
Prerequisite: ACCT 4040/8046.

## ACCT 8270 - E-Business and the Accounting Profession (3)

This course focuses on the impact of E-Business on the accounting profession, including issues arising from new technologies, new business models, security controls and the legal environment.

Prerequisite: Introduction to Management Information Systems.

## ACCT 8280 - Seminar in Accounting Information

 Systems (3)This course examines current topics in Accounting Information Systems (AIS), how AIS contributes to business effectiveness and ineffectiveness, and the interaction between AIS and human decision-makers.

Prerequisite: Admission to MACC or MBA program or permission of instructor.

## ACCT 8290 - Advanced Financial Auditing (3)

This course will provide students with an intense study of financial auditing in accordance with generally accepted auditing standards.
Prerequisite: Admission to MAcc or MBA program or permission of the Director of the MAcc program. ACCT 4080 with a grade of "C" (2.0) or better.

## ACCT 8900 - Independent Research (3)

Individual research supplementing graduate study in a specific area within the Accounting discipline. May be repeated to a maximum of six hours.

Prerequisite: Completed contract and permission needed from director of MACC program.

## ACCT 8910 - Special Topics in Accounting (3)

A variable content course with accounting topics selected in accordance with student and faculty interest. May be repeated to a maximum of six (6) hours.
Prerequisite: Permission of instructor.

## ACCT 8060 - Advanced Managerial Accounting (3)

## AE - Architectural Engineering

## AE 8010 - Graduate Design Project I (3)

First of two-course capstone design project for the MAE degree. Students will perform a detailed investigation in their MAE Option Area culminating in a professionallywritten report and oral presentation that demonstrates both mastery of the subject and a high level of writing and oral communication skills.

Prerequisite: CIVE341; AE 4020 or AE 4010 or permission.

## AE 8020 - Graduate Design Project II (2)

Second of two-course capstone design project for the MAE degree. Students will complete a detailed investigation in their MAE Option Area culminating in a professionallywritten report and oral presentation that demonstrates both mastery of the subject and a high level of writing and oral communications skills.

Prerequisite: AE 8010.

## AE 8030 - Building Communication Systems (3)

Integration of voice, data and video systems into overall building design. Topics include: scalability, wireless systems; interference; project management; current industry standards and protocols.

Prerequisite: AE 3220.

## AE 8050 - Sustainable Building Design (3)

Integrates building design with the principles of minimum resource use, energy conservation, and healthy indoor environments.

Prerequisite: CIVE 341; and AE 3100 or AE 8410.

## AE 8060 - Architectural Engineering Professional Practice I (3)

Investigation of issues related to the integration of building design processes with professional architectural engineering practice. Aspects of building design project finance, budgets, contracts, legal issues, professional licensure, and professional responsibility. The perspective of life-cycle costing. Professional ethics will be thoroughly integrated with all course topics.

Prerequisite: ISMG 2060.

## AE 8070 - Architectural Engineering Professional Practice II (3)

Continuation of investigation of issues related to the integration of building design processes with professional architectural engineering design practice. Building design specifications, estimating, bidding, building construction contract negotiations, building design project management, project team personnel management, project risk, and key regulatory measures.

Prerequisite: ISMG 2060, AE 8060.

## AE 8080 - Applied Experimental Design and Statistical Analysis (3)

Overview of advanced experimental design methods and statistical analysis techniques. Application of these to the planning, execution, analysis, and description of research in architectural engineering.

Prerequisite: STAT 3800.

## AE 8090 - Interdisciplinary Team Design Project (4)

Develop and design the electrical, lighting, mechanical, and structural systems for a building, from programming through construction documents, as an interdisciplinary team effort.

Prerequisite: AE 4200 or AE 8206 or AE 4120 or CIVE 441.

## AE 8116 - Indoor Air Quality Engineering (3)

Engineering approach to understanding indoor air quality. Topics include codes, standards, HVAC equipment, commissioning, operation, maintenance, investigation and remediation.

Prerequisite: AE 3120. Crosslisted as: AE 4110.

## AE 8120 - Building Control and Automation Systems (3)

Fundamental concepts of building control theory and automation. Building control: state-variable plant and closed-loop system representation, time and frequency response, stability, root-locus methods and design of building control systems. Automation: thermostats, dampers, valves, direct digital control, control of air handling units, terminal units, primary building systems, supervisory control and system optimization, communication systems, BACnet, and DDC system design and implementation.
Prerequisite: MATH 2350 ; AE 3100, 4120.

## AE 8140 - Building Energy III: Advanced Systems (4)

Advanced analysis, design, and modeling of building energy systems. Mass transfer and exchangers, vapor compression chillers, central cooling plants, boilers systems and heating plants, cooling storage systems and plants, and cogeneration systems and plants.

Prerequisite: MENG 3000, MENG 4200 or MENG 8200, AE 3100, AE 4120, and permission.

## AE 8150 - Building Energy Simulation and Performance Contracting (3)

Integrated approach to deliver energy improvement retrofit projects that provide economical and ecological benefits. Proficiency in EnergyPlus or DOE-2 and in retrofit cost estimation will be attained and integrated into an engineering economic analysis. Partnering configurations, contracts, financing, and measurement and verification. Concepts applied to a practical class project.
Prerequisite: AE 3100, 4120, 4140, and 4400.

## AE 8170 - Theory and Application of Thermal Systems Measurement (3)

Analysis, theory, and methods of instrumentation for thermal system energy consumption measurement and scientific research testing. Emphasis placed on sensors, transducers, and error analysis.

Prerequisite: STAT 8805 or equivalent.

## AE 8180 - Indoor Air Quality Design (3)

Engineering approach to indoor air quality design. Topics include modeling and calculation methods to predict and design for acceptable indoor air quality.

Prerequisite: AE 3120 and AE 4110/8116, or permission.

## AE 8206 - Lighting II: Theory, Design \& Application (3)

Design and analysis of lighting systems; the emphasis is on the integration between the lighting design process and the technical foundations for building lighting; topics include
design criteria; lighting design procedures, lighting modes and subjective effects; calculation tools. Lab sessions include photometric measurements and computer applications.
Prerequisite: AE 3200. Crosslisted as: AE 4200.

## AE 8210 - Lighting III: Advanced Design Practice (3)

Design and analysis of lighting for outdoor sports, floodlighting and interior applications; economic analysis; modeling algorithms; advanced photometrics.

Prerequisite: AE 8206.

## AE 8220 - Electrical Systems for Buildings II (3)

Power systems analysis and design, integration of electrical system components into functional, safe, and reliable power distribution systems for commercial and industrial facilities. Per Unit Analysis, Fault Analysis, Power Quality, Grounding, Overcurrent Protection Coordination, Complete power system design.

Prerequisite: AE 3220.

## AE 8230 - Light Sources (3)

Fundamental science and principles of light generation in modern electric light sources; characteristics that influence applications of light sources.

Prerequisite: AE 8206.

## AE 8250 - Daylighting (3)

Use of natural light in building design. Solar position, sky luminance, distribution models, daylighting equipment, calculation methods, and psychological concepts. Extensive use of computer modeling and scale models.

Prerequisite: AE 8206.

## AE 8306 - Advanced Noise Control (3)

Characterization of acoustic sources; use and measurement of sound and intensity; sound-structure interaction; acoutic enclosures and barriers; muffling devices; vibration control; and active noise control.

Prerequisite: AE 3300. Crosslisted as: AE 4300.

## AE 8330 - Advanced Architectural Acoustics (3)

Advanced study of the behavior of sound in rooms. Design of acoustical spaces; physical and computational modeling; measurement techniques; and introduction to sound reinforcement in rooms.

Prerequisite: AE 3300.

## AE 8350 - Electroacoustics (3)

Electrical-mechanical-acoustical circuit analogies; transducers, loudspeakers, microphones, and accelerometers; directivity; calibration techniques; and sound reinforcement systems in rooms.

## Prerequisite: AE 3300.

## AE 8510 - Masonry and Timber Design (3)

Masonry as a structural material, unreinforced masonry design, reinforced masonry design, state-of-the-art assessment methods for existing masonry structures, timber as a structural material, timber design.

Prerequisite: CIVE 440 and CIVE 441 or equivalents.

## AE 8920 - Individual Instruction in Architectural Engineering (1-3)

Individual instruction in Architectural Engineering at the graduate level in a selected area, under the supervision and guidance of an Architectural Engineering faculty member.
Prerequisite: Permission.

## AE 8940 - Special Topics in Architectural Engineering (3)

Special topics in Architectural Engineering at the graduate level that are not yet covered in other courses in the Architectural Engineering curriculum.

Prerequisite: Permission.

## AE 8950 - Individual Instruction in Architectural Engineering (1-3)

Individual instruction in Architectural Engineering at the graduate level in a selected area, under the supervision and guideance of an Architectural Engineering faculty member.
Prerequisite: Permisson.

## AE 8990 - Master's Thesis (1-10)

Masters Thesis.
Prerequisite: Admission to Architectural Engineering masters degree program and permission of major advisor.
AE 9160 - Building Energy Systems Modeling, Control, and Optimization (3)

Modeling, control and optimization of the secondary building energy systems; building envelope, room comfort zones, air handling units, cooling and heating water loops.
Prerequisite: AE 4100 or AE 8120, or permission.

## AE 9180 - Computational Fluid Dynamics Modeling of Indoor Environments (3)

Application of computational fluid dynamics software to modeling of indoor environments. Topics include turbulence modeling, boundary conditions, natural and forced convection flows, species transport, and fire modeling.
Prerequisite: AE 4110/8116, or permission.

## AE 9200-Color Theory (3)

Theories of color vision; theoretical and mathematical basis for chromaticity, color temperature, color rendering metrics, color matching functions, and color spaces; spectral weighting functions; measurement of color.

Prerequisite: AE 4200/8206.

## AE 9210 - Current Research in Illuminating Engineering (3)

Examination of the most current research in illuminating engineering. Study of experimental methodologies and research practices. Analysis of technical papers from current lighting journals.
Prerequisite: Graduate standing and permission of instructor.

## AE 9220 - Behavioral Sciences for Lighting Research (3)

Overview of experimental design methods and statistical analysis techniques, specifically as these are applied to the planning, execution, analysis and description of lighting experiments.

## AE 9300-Current Topics in Architectural Acoustics

 (3)A review of current topics in architectural acoustics. Subjects may include objective versus subjective measures in performance spaces, electronic enhancement of rooms, advanced computational modeling techniques, and auralization.

Prerequisite: AE 8330.
AE 9970-Research Other than Thesis (1-6)
Supervised non-thesis research and independent study.
Prerequisite: Permission.

## AE 9980-Special Topics (1-3)

Advanced topics in architectural engineering not covered in other 9000 level courses.

Prerequisite: Permission.

## AE 9990 - Doctoral Dissertation (1-24)

(1-24 credits, max 55)
Prerequisite: Admission to doctoral degree program and permission of supervisory committee chair.

## AERO - Aerospace Studies

## AERO 8605 - International Aviation (3)

This course examines global air transport and its impact on the development of the global economy. Lectures and readings will provide a solid foundation of historical
knowledge about international air transport and its development in various countries, before exploring current policy debates about liberalization, global alliances, and other critical issues.

Prerequisite: AVN 8020 or permission of the instructor.

## ANTH - Anthropology

## ANTH 8206 - Urban Anthropology (3)

The course is intended to examine the city from an anthropological point of view. Included will be an overview of its history and the processes by which cities are formed and grow as well as the internal structure and processes within the city. The course is intended to be comparative geographically and temporally. Topics covered will include urbanization and cities in both the socalled "third-world" countries as well as in the developed, industrialized ones. Graduate students will be required to do a substantive term paper on a topic mutually acceptable to both the instructor and the student. In addition to the written work, the student will also be required to make an oral presentation in class of the research done and the major findings.

Prerequisite: Permission of instructor. Crosslisted as: ANTH 4200.

## ANTH 8216-Cultural Anthropology (3)

Arts, economics, family, kinship, politics, religion, subsistence, technology, war and world view approached as parts of an integrated whole, a way of life in human society. Illustrations will be drawn from a number of societies, anthropological theories and methods of study.

Prerequisite: Permission of instructor. Crosslisted as: ANTH 4210.

ANTH 8226 - North American Archaeology (3)
American Indian culture history in North America, with emphasis on the peopling of the new world, origin and development of new world agriculture, development of middle American civilizations and their impact on core areas of village-farming in the continental United States; introduction to archaeological investigation techniques, dating methods and taxonomic concepts.

Prerequisite: For 4220, ANTH 1050 or 4210 . For 8226, permission of instructor. Crosslisted as: ANTH 4220.

## ANTH 8526 - Psycholinguistics (3)

A discussion of the literature concerned with how such psychological variables as perception, learning, memory and development relate to the linguistic variables of sentence structure, meaning and speech sounds.

Prerequisite: Senior or graduate or permission of instructor. Recommended: ANTH 1050. Crosslisted as: ANTH 4520.

ANTH 8926 - Seminar in Anthropological Problems (3)
Seminar will cover a specific topic which will be announced each time the course is offered. The students will work with the instructor on projects designed to increase the student's depth of knowledge in specific areas.

Prerequisite: Permission of instructor. Crosslisted as: ANTH 4920.

## ART - Art and Art History

## ART 8006 - Special Studies in Art Education (1-3)

A series of intensive courses in the history and theory of art education designed specifically for elementary and secondary school art teachers. These courses are scheduled as special seminars or workshops according to purpose.

Prerequisite: Graduate and permission of department. Crosslisted as: ART 4000.

## ART 8106 - Independent Study-Drawing (3)

Advanced, individualized instruction in various graphic media, as determined by the student and instructor.

Prerequisite: Permission. Lab fee required. Crosslisted as: ART 8116 and ART 4100 and ART 4110.

ART 8116 - Independent Study-Drawing (3)
Advanced, individualized instruction in various graphic media, as determined by the student and instructor.
Prerequisite: Permission. Lab fee required. Crosslisted as: ART 4100 and ART 4110 and ART 8106.

ART 8310 - Graduate Sculpture (3)
Advanced problems in sculptural media.
Prerequisite: 8316. Lab fee required.
ART 8316 - Advanced Sculpture (3)
Advanced work in area of student's choice with facilities for oxyacetylene welding, arc welding and wood working.
Prerequisite: Art 3310 and permission of instructor. Lab fee required. Crosslisted as: ART 4310.

## ART 8410 - Graduate Painting (3)

More complex problems in the oil medium and related material.

Prerequisite: ART 8416. Lab fee required.

## ART 8416 - Advanced Painting (3)

Instruction in various painting media permits each student the time to work and develop individually. Strong emphasis on knowledge of contemporary art.

Prerequisite: ART 3410 and permission of instructor. Lab fee required. Crosslisted as: ART 4410.

## ART 8510 - Special Processes in Printmaking (3)

Advanced problems in printmaking stressing special processes in lithography, intaglio and collograph. Strong emphasis on image and content development.
Prerequisite: ART 4510 and permission. Lab fee required.
ART 8516 - Advanced Techniques in Printmaking (3)
Intaglio and lithography stressing color and technical proficiency in both media. Strong emphasis on image and content development.

Prerequisite: For 8516: ART 2510, 3510 and permission of instructor. Lab fee required. Crosslisted as: ART 4510.

## ART 8616 - Advanced Ceramics (3)

Advanced work on the potter's wheel, glaze composition, loading and firing of gas and electric kilns.

Prerequisite: For 4610, ART 3610. For 8616, permission. Crosslisted as: ART 4610.

ART 8706 - Cross-cultural Art History for Teachers (3)
An exploration of the arts of five cultures: Pre-Columbian, Native American, African, Asian, and European. A comparative approach will be taken to allow students to explore the reasons for making art and its relationship to the religion, politics and everyday life of the cultures. The influence of these cultures on contemporary American art also will be explored.
Prerequisite: Graduate standing and permission of instructor. Crosslisted as: ART 4700.

## ART 8716 - Ancient Art History (3)

A study of the art of ancient civilizations. The course includes ancient Egypt and the Mesopotamian peoples.
Prerequisite: Graduate standing and permission of the instructor. Crosslisted as: ART 4710.

ART 8726 - Women in Ancient and Medieval Art (3)
A study of women in the ancient and medieval periods. The course will focus on several related topics: the representation of women in art, the role of women in the societies of this period and their possible role as artists, and the feminist critique of traditional views of art history.
Prerequisite: Graduate standing and permission of instructor. Crosslisted as: ART 4720.

## ART 8736 - Classical Art History (3)

A study of painting, sculpture, architecture and minor arts of the classical world beginning with Cycladic art and including Minoan, Mycenaean, Greek, Etruscan and Roman art through 300 A.D.

Prerequisite: Graduate and permission of instructor. Lab fee required. Crosslisted as: ART 4730.

## ART 8756 - Late Roman and Byzantine Art History (3)

A study of painting, sculpture and architecture of the Eastern Roman Empire from the founding of Constantinople, and of Western Europe from the time of Constantine to the dissolution of the Western Roman Empire.

Prerequisite: Graduate and permission of instructor. Lab fee required. Crosslisted as: ART 4750.

## ART 8776 - Early Medieval Art History (3)

A study of painting, sculpture and architecture of Western Europe from the time of the Migrations to 1150 A.D.

Prerequisite: Graduate and permission of instructor. Lab fee required. Crosslisted as: ART 4770.

## ART 8786 - Later Medieval Art History (3)

A study of the painting, sculpture and architecture of Western Europe from approximately AD 1150 to AD 1500.

Prerequisite: Graduate standing and permission of the instructor. Crosslisted as: ART 4780.

## ART 8816 - Northern European Renaissance Art History (3)

A study of painting, sculpture and architecture during the 14th, 15th and 16th centuries in France, the Low Countries, Germany, Spain and England.

Prerequisite: Graduate and permission of instructor. Lab fee required. Crosslisted as: ART 4810.

## ART 8836 - Italian Renaissance Art History (3)

A study of painting, sculpture and architecture in Italy during the 14th, 15th and 16th centuries.
Prerequisite: Graduate standing and permission of instructor. Lab fee required. Crosslisted as: ART 4830.

ART 8856 - Baroque and Rococo Art History (3)
A study of painting, sculpture and architecture in Europe during the 17 th and 18 th centuries.

Prerequisite: Graduate and permission of instructor. Lab fee required. Crosslisted as: ART 4850.

## ART 8866 - Art and Feminism since 1800 (3)

This course introduces students to representative female artists, architects, gallery owners, patrons, museum curators, art historians, and critics. Moreover, it will explore the social constraints and critical positions that limited female involvement in the visual arts in Europe and North America during the 19th century. It will also stress the essential theories and social concerns that have informed modern feminism, as well as reveal how feminism has shaped or mediated the visual arts and art historical scholarship since 1970.

Prerequisite: Art 2050 and Art 2060 plus junior standing. For non-majors, junior standing and permission of the instructor. Crosslisted as: ART 4860.

## ART 8876 - North American Art: From the Colonial Period to the Armory Show of 1913 (3)

The study of art, architecture, and material culture produced in the United States before 1913 approached through varied contexts (artistic, religious, political, economic, etc.) and methodologies.
Prerequisite: Graduate standing and permission of the instructor is required. Crosslisted as: ART 4870.

## ART 8886 - Modern Art I (Art of Europe and the Americas, 1850-1920) (3)

A study of the most significant developments in European art and architecture dating from the early modern period and examined in varied contexts (artistic, religious, political, economic, etc.). The artistic movements covered include Realism, Impressionism, Post-Impressionism, Symbolism, Art Nouveau, Cubism, Fauvism, and German Expressionism.

Prerequisite: For Art 8886-001, graduate standing and permission of the instructor is required. Crosslisted as: ART 4880.

## ART 8896 - Modern Art II (Art of Europe and the Americas, 1918-1968) (3)

Major artistic movements and artists active in Europe and the Americas between the end of WWI and the Vietnam Era circa 1968 examined through varied contexts (artistic, religious, political, economic, etc.). The artistic movements covered include Russian Constructivism, Dadaism, Social Realism and Regionalism, Abstract Expressionism, Pop and Op art.

Prerequisite: For Art 8896-001, graduate standing and permission of the instructor is required. Crosslisted as: ART 4890.

ART 8906 - Contemporary Art History since 1968 (3)
A study of contemporary art practices since the late 1960s approached through major themes and issues that may include the intersection of fine and popular culture, censorship debates and arts activism, the contested role of the museum and art market, public arts initiatives, the critical and cultural context for debates on Postmodernist art, and the growing importance of New Media in contemporary art practices.

Prerequisite: For Art 8906-001, graduate standing and permission of the instructor is required. Crosslisted as: ART 4900.

## ART 8910 - Independent Study in Art History (1-3)

Independent research under the direct supervision of the sponsoring faculty member, generally involving the
writing of a paper. The topic of the research and the expectations for credit should be jointly agreed upon in writing by the student and the faculty member at the beginning of the semester.
Prerequisite: Permission of instructor.

## ART 8930 - Special Topics in Art History (3)

An illustrated lecture course dealing with a limited topic in art history. The course may be coordinated with an external event such as an exhibition, publication or study trip.

Prerequisite: To be determined by the instructor, based upon the preparation required for an adequate understanding of the material of the course.

## AVN - Aviation

## AVN 8020 - Survey of Aviation Administration and Transportation Policy (3)

The purpose of the course is to acquaint students with advanced concepts of aviation administration and the implementation of aviation policy within the public sector and to identify key concepts and critical issues both domestic and international. The primary focus is to explore the various affects that have resulted from the formation and enactment of major aviation and transportation regulatory issues.
Crosslisted as: PA 8020.

## AVN 8030 - Internship in Aviation Administration (16)

A maximum of 6 hours to be granted upon completion of written report on internship. The internship will be in some area of aviation administration: national, state, local or non-profit agency and in some instances public-oriented private agencies. Students will take the course as Credit/No Credit. May be taken for a maximum of 6 hours of credit.
Prerequisite: Permission of aviation graduate program coordinator.

## AVN 8040 - Internship in Aviation Administration (16)

A maximum of 6 hours to be granted upon completion of written report on internship. The internship will be in some area of aviation administration: national, state, local or non-profit agency and in some instances public-oriented private agencies. Students will take the course as Credit/No Credit. May be taken for a maximum of 6 hours of credit.

Prerequisite: Permission of aviation graduate program coordinator.

## AVN 8060 - Transportation Security (3)

This course explores contemporary issues in transportation by applying lessons learned from the historical development of national and international transportation
security in the post $9 / 11$ world. Topics include the influences of crime and terrorism on the conduct of transportation operations; the role of government in the formulation of transportation security policies, procedures, and practices; the study of individual airport, seaport, rail, and highway security systems; and contemporary passenger and cargo screening issues. Strategies and efforts to counter current and emerging threats will also be examined.

Prerequisite: PA 8050, PA 8100, PA 8090 Organizational Theory (May be taken concurrently with AVN 8045).

## AVN 8070 - Case Research (3)

The purpose of this course is to introduce the student to key concepts through the casewriting method of interactive learning. Issues within the public sector will be explored. The casewriting experience integrates key issues and concepts. This opportunity allows the student to explore specific topical areas through the case research method.

Crosslisted as: PA 8070.

## AVN 8086 - Airport Safety and Security (3)

This course will explore the role of airports in relation to safety and security. Topics will include regulations, responsibilities, security issues, ramp safety, disaster preparedness, and emergency management.

Prerequisite: AVN 1000 or its equivalent or permission of the instructor. Crosslisted as: AVN 4080.

## AVN 8095 - Airport Administration and Planning (3)

The course covers the principles of airport master planning. Fundamental principles of airport layout and design include runway configuration, airside/lanside technology, passenger and cargo terminal. Capacity and delay effects will be emphasized.

Crosslisted as: AVN 3090.

## AVN 8100 - Seminar in Public Administration (1-3)

This course is an in-depth study of the relationships between the processes of government and the practice of public administration. Broad categories of political and administrative issues are examined to determine their impact on the administration of public and non-profit agencies.

Prerequisite: Permission of graduate adviser. Crosslisted as: PA 8100.

## AVN 8120 - Research Methods for Aviation Administration (3)

This course is designed to assist students develop their skills in quantitative analysis of information relevant to pubic affairs. The course introduces students to fundamentals of research designs, strategies of data collection and basic statistical analysis.

Crosslisted as: PA 8120.

## AVN 8155 - Aviation Law (3)

This course will increase the student's knowledge of aviation law. Particular attention will focus on the manner in which legal forces affect the aviation system.

Prerequisite: AVN 1000 or equivalent or instructor permission. Crosslisted as: AVN 3150.

## AVN 8250 - Airport Administration (3)

AVN 8250 provides an extensive overview of the responsibilities associated with the operation and administration of public airports. Federal policies and regulations, contemporary and emerging management issues, and accepted practices related to the operation and management of commercial service and general aviation airports as an integral component of the national and international transportation system will be examined.

Prerequisite: None.

## AVN 8360 - Transportation Safety (3)

Safety is a fundamental concern in any transportation mode and a required competency for individuals working in any transportation or public works field. This course provides a thorough overview of the development and maintenance of safety policies and procedures for transportation activities. The federal Safety Management System (SMS) process including Quality Management Strategies using safety risk management (hazard identification, risk assessment and control) serves as the foundation for understanding the need to implement a safety culture stressing proactive v . reactive transportation safety program development and management. Predictive tools and methods such as Gap Analysis (GA), Fault Tree Analysis (FTA), and data sharing approaches are explored. Environmental Protection and Occupational Health and Safety policy and programs affecting transportation mode safety are also examined.

Prerequisite: PA 8050.

## AVN 8370 - Airport Development (3)

AVN 8370 focuses on the planning process and applied design criteria associated with the development of public airports. Federal, state and regional systems, and specific airport master planning initiatives will be examined. Application of airport design standards and recommendations for the development of appropriate navigable airspace, airfield facilities, passenger terminals, and other components of the airport's physical plant will be covered.

Prerequisite: AVN 8250 - Airport Administration.

## AVN 8480 - Seminar in Public Financial Administration (3)

The study of public finance administration policy and technique areas. Emphasis is placed on the technical aspects of public finance administration with particular emphasis on the purposes, processes, and issues associated with particular techniques or technique areas.

Prerequisite: PA 8050 or permission of department. Crosslisted as: PA 8480.

## AVN 8510 - Aerospace Education Workshop (3)

This course will focus on aviation and space education and its impact on society. It will seek to communicate knowledge, impart skill, and develop attitudes relative to the scientific, engineering and technical as well as the social, economic and political aspects of aviation and space flight efforts.
Prerequisite: Graduate. Crosslisted as: TED 8510.

## AVN 8605 - International Aviation (3)

This course examines global air transport and its impact on the development of the global economy. Lectures and readings will provide a solid foundation of historical knowledge about international air transport and its development in various countries, before exploring current policy debates about liberalization, global alliances, and other critical issues.

Prerequisite: AVN 8020 or permission of the instructor. Crosslisted as: AVN 3600.

## AVN 8626 - Airport Planning and Design (3)

Planning and design of general aviation and air-carrier airports. Land-side components include vehicle ground access systems, vehicle circulation, parking and terminal buildings. Air-side components include aircraft apron-gate area, taxiway system, runway system and air traffic control facilities and airspace. Emphasis on design projects.
Prerequisite: CE 3610 or permission from instructor. Crosslisted as: AVN 4620.

## AVN 8750 - Transportation Finance (3)

This course focuses on the financial administration of public transportation facilities with a strong emphasis on commercial service airports. Areas of emphasis include: fiscal and managerial accounting strategies, capital development financing, revenue and cost centers, the economic impact of airports, airport performance measures. Current trends and issues associated with transportation finance are discussed.

Prerequisite: PA 8010 and AVN 8020.

## AVN 8896 - Critical Issues in Aviation Administration (3)

A study of timely as well as timeless issues in aviation. Topics will cover dynamic critical issues in the field of aviation. These issues emphasize recent and significant changes and evolutionary developments found in various components of the aviation industry. Students will need access to and a working knowledge of the World Wide Web.

Crosslisted as: PA 4890 and PA 8896 and AVN 4890.

## AVN 8906 - Special Topics in Aviation Administration (1-3)

This course will address various topics in the Aviation Industry, determined each time the course is offered. Possible topics include international aviation, current issues and regulatory agencies within the industry, along with other topics.
Crosslisted as: AVN 4900.
AVN 8920 - Readings in Aviation Administration (1-3)
Specially planned readings in public administration for the graduate student who encounters scheduling problems in the completion of his degree program, or who has special preparatory needs and who is adjudged by the department to be capable of pursuing a highly independent course of study.
Prerequisite: Eighteen hours in the MPA program or permission of graduate program committee.

## AVN 8940 - Research in Aviation Administration (1-3)

The course is intended for advanced graduate students in public administration. It is especially suited for those incareer students who have had their internships waived and who might profit more by in-depth research on a problem of public administration rather than additional classroom courses.

Prerequisite: Twenty-one hours in the MPA program or permission of the graduate program committee.

## AVN 8980 - Thesis (1-6)

A research project, designed and executed under the supervision of the chair and members of the graduate student's Thesis Advisory Committee. In this project, the student will develop and perfect a number of skills including the ability to design, conduct, analyze, and report the results in writing (i.e., thesis) of an original, independent scientific investigation. The project plan must be approved by the student's Thesis Advisory Committee.

Prerequisite: Graduate major in Public Administration and approval of Thesis Advisory Committee. Crosslisted as: PA 8980.

## AVN 9900 - Advanced Topics (3)

This course provides a format for exploration of topics of interest to advanced students in public administration. Topics covered will change periodically in keeping with the interests of faculty and students.

Prerequisite: Admission to PhD program in Public administration or permission of instructor. Crosslisted as: PA 9900.

## AVN 9970 - Directed Research in Public Administration (1-6)

This course offers a structure for doctoral students to conduct advanced research in their chosen area of specialization.
Prerequisite: Admission to $\mathrm{Ph} . \mathrm{D}$. program in public administration and permission of instructor. Crosslisted as: PA 9970.

## AVN 9980 - Directed Readings in Public Administration (1-6)

This course is designed to provide the advanced graduate student with the opportunity to do extended readings on a specialized public administration topic.
Prerequisite: Admission to Ph.D. program in public administration and permission. Crosslisted as: PA 9980.

## BIOI - Bioinformatics

## BIOI 4860 - Bioinformatics Algorithms (3)

The main objective of this course is to provide an organized forum for students to learn recent developments in Bioinformatics, particularly, from the algorithmic standpoint. The course will present basic algorithmic concepts in Bioinformatics and show how they are connected to molecular biology and biotechnology. Standard topics in the field such as restriction mapping, motif finding, sequence comparison, and database search will be covered. The course will also address problems related to Bioinformatics like next generation sequencing, DNA arrays, genome rearrangements and biological networks.

Prerequisite: CSCI 3320 and BIOL 1450; Or permission of instructor. Crosslisted as: BIOI 8866.

## BIOI 8866 - Bioinformatics Algorithms (3)

The main objective of this course is to provide an organized forum for students to learn recent developments in Bioinformatics, particularly, from the algorithmic standpoint. The course will present basic algorithmic concepts in Bioinformatics and show how they are connected to molecular biology and biotechnology. Standard topics in the field such as restriction mapping, motif finding, sequence comparison, and database search will be covered. The course will also address problems
related to Bioinformatics like next generation sequencing, DNA arrays, genome rearrangements and biological networks.

Prerequisite: CSCI 3320 and BIOL 1450; Or permission of instructor.

## BIOI 8896 - Genetic Sequence Analysis (3)

The goal of this course is to introduce students to major topics in computerized analysis of genetic sequences. In particular the course will allow students to become familiar with the computational tools and software that aid in the modern molecular biology experiments and analysis of experimental results. Following the completion of this course, it is expected that the students will have a basic understanding of the theoretical foundations of the sequence analysis tools and develop competence in evaluating the output from these tools in a biological context. This course will emphasize hands-on experience with the programs for nucleotide and amino acid sequence analysis and molecular phylogeny.

Prerequisite: Permission from the instructor.

## BIOL - Biology

## BIOL 8010 - Seminar in Biology (1)

A study of current research in any of the divisions of biology. Graduate students will complete this course once for credit.

Prerequisite: Graduate.

## BIOL 8020 - Independent Research in Biology (1-3)

Research work under supervision of a member of the graduate faculty. May be taken more than once for credit; up to 4 credits for thesis option of M.S. degree and up to 6 credits for the non-thesis option of the M.S. degree.
Prerequisite: Graduate and written permission of graduate faculty supervisor.

## BIOL 8060 - Advanced Topics in Biology (1-3)

Lecture and/or laboratory courses for graduate students designed to provide exposure to biological specialities not offered in the regular curriculum.

Prerequisite: Graduate and permission.

## BIOL 8070 - Advanced Readings in Biology (1-3)

An in-depth study of the literature in a limited segment of the biological sciences under the supervision of a graduate faculty member. May be taken more than once for credit up to a total of six credits.

Prerequisite: Graduate and written permission of graduate faculty member.

## BIOL 8126 - Conservation Biology (3)

Directed study in preservation, conservation and management of native and reestablished ecosystems and biota. One two-day field trip may be scheduled.
Prerequisite: Graduate in biology or permission of instructor. Recommended: BIOL 3340/8345. Crosslisted as: BIOL 4120.

## BIOL 8136 - Molecular Genetics (3)

Examination of current topics in molecular genetics including DNA perpetuation and packaging, gene structure and regulation, and gene cloning methods and their application. Lecture, discussion and laboratory.
Prerequisite: BIOL 2140, 3020 and CHEM 2210 or 2260 or their equivalents. Crosslisted as: BIOL 4130.

## BIOL 8146 - Cellular Biology (4)

This course is a comprehensive study of the structure and function of plant and animal cells.
Prerequisite: Junior-Senior, BIOL 2140, 3020, and organic chemistry, or instructor's permission. Crosslisted as: BIOL 4140.

## BIOL 8180 - Biosystematics (4)

A study of principles and techniques in animal and plant biosystematics. The course will focus on experimental investigation of the species problem, including molecular approaches. Lecture/discussions and laboratory.
Prerequisite: Graduate in biology and permission of instructor.

## BIOL 8186 - Limnology (4)

A study of the physical, chemical and biotic relationships that serve to establish and maintain plant and animal communities in a freshwater environment.

Prerequisite: BIOL 1450, 1750, and organic chemistry. Crosslisted as: BIOL 4180.

## BIOL 8190 - Communities and Ecosystems (3)

Advanced study of populations, communities and ecosystems; may require overnight weekend field trips.

Prerequisite: BIOL 3340/8345, permission of instructor, graduate in biology.

## BIOL 8200 - Plant Ecology (4)

Advanced study of plant communities and of individual plant species including relationships with the environment and vegetative dynamics. Emphases on methods of evaluation and analysis. May require overnight field trips.

Prerequisite: BIOL 3340/8345, permission of instructor, graduate in biology. Recommended: BIOL 3530/8535. (Fall).

## BIOL 8216 - Fire Ecology (3)

Study of fire in ecosystems including characteristics of fire, effects on flora, fauna and the abiotic environment, and use in maintaining native ecosystems. May include two weekend field exercises.

Prerequisite: BIOL 3340, graduate in biology or
permission of instructor. Crosslisted as: BIOL 4210.
BIOL 8226 - Population Biology (4)
An examination of topics in population ecology and population genetics including selection on individuals and groups, mating systems, life history characteristics, growth and regulation of populations and population interactions. Outside research project required.
Prerequisite: BIOL 2140 and 3340 or permission of instructor, junior-senior. Crosslisted as: BIOL 4220.

BIOL 8235 - Microtechnique (3)
A course in the techniques of fixation, dehydration, staining, cleaning and mounting biological material in the manufacture of microscope slides.

Prerequisite: Two years of biological sciences. Crosslisted as: BIOL 3230.

## BIOL 8236 - Organic Evolution (3)

A study of organic evolution in terms of evidences which support the theory and the mechanisms involved in the process.

Prerequisite: BIOL 2140. Lecture and discussion only. Crosslisted as: BIOL 4230.

## BIOL 8246 - Marine Biology (3)

An introduction to the marine environment, this course explores physical conditions of the ocean including ocean chemistry, salinity, waves and currents, and tides as well as the ecology of planktonic, nektonic and benthic organisms-- their communities and environments. Impacts of humans on the marine environment will also be covered.

Prerequisite: CHEM 1180/1184, BIOL 3340. Crosslisted as: BIOL 4240.

## BIOL 8250 - Design and Analysis of Biological Research (3)

This course examines the statistical aspects of the design of laboratory and field experiments in biology. Basic statistical methods are reviewed and advanced methods presented. Statistical computer packages are used.
Prerequisite: Undergraduate course in statistics is recommended.

## BIOL 8256 - Field Marine Biology (1)

This lab is a hands-on introduction to the marine environment using a field trip to the Gulf Coast. Students
will observe first-hand examples of local marine habitats and organisms. Students will be required to take a trip to the Gulf Coast of Texas, Louisiana, Mississippi, and Alabama during Spring Break. Students will be required to provide their own basic camping and snorkeling gear.

Prerequisite: CHEM 1180/1184, BIOL 3340, previous or concurrent enrollment in BIOL 4240. Crosslisted as: BIOL 4250.

## BIOL 8276 - Animal Behavior (3)

Behavior of diverse animals for the understanding of the relationships between nervous integration and the behavior manifested by the organism, as well as the evolution and adaptive significance of behavior as a functional unit.
Prerequisite: BIOL 1750 and PSYCH 1010 or permission of instructor. Lecture only. Crosslisted as: BIOL 4270 and PSYC 4270 and PSYC 8276.

## BIOL 8286 - Animal Behavior Laboratory (1)

Laboratory and field studies of animal behavior with an ethological emphasis. Classical laboratory experiences and independent studies will be conducted.
Prerequisite: BIOL/PSYC 4270/8276 or permission of instructor. Crosslisted as: BIOL 4280 and PSYC 4280 and PSYC 8286.

## BIOL 8300 - Ecology of Running Water (4)

This course will cover current topics in stream ecology with an emphasis on the impact of modern human management of prairie and Midwestern streams. Students will read, analyze, and discuss selected articles from major journals. Several field trips will be conducted to allow students to examine actual streams of different types throughout the Midwest.

Prerequisite: BIOL 3340/8345 or BIOL 4180/8186 or permission of the instructor.

## BIOL 8326 - Hormones \& Behavior (3)

In this course, students will examine the interaction between hormones, chemical messengers released from endocrine glands, and behavior in both human and animal systems. Methods for studying hormonal issues on behavior will be addressed. This course will provided students in psychology, biology, and related disciplines an understanding of how hormones affect sensory processing, motor activities, and processing of information in the central nervous system.

Prerequisite: For BIOL/PSYC 4320: PSYC 1010 and either BIOL 1020 or 1750; for BIOL/PSYC 8326: admission into the graduate college. Crosslisted as: PSYC 4320 and BIOL 4320 and PSYC 8326.

## BIOL 8330 - Advanced Topics in General Physiology (3)

Studies in general physiology including such topics as photo-physiology, hormonal regulation of metabolic pathways, temperature-related phenomena, and cytogenetic physiology. Lecture, laboratory, and written report.

Prerequisite: Graduate in biology.

## BIOL 8345 - Ecology (4)

Study of interrelationships between organisms and their biotic and abiotic environment; includes population biology, community dynamics, biotic interactions and evolution. Labs include field exercises.

Prerequisite: BIOL 1450 and 1750. Crosslisted as: BIOL 3340.

## BIOL 8346 - Ichthyology (4)

A study of the biology of fishes, including their evolution, anatomy, physiology, ecology, distribution, classification and identification with emphasis on North American freshwater fishes.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 4340.

## BIOL 8356 - Lichenology (3)

Taxonomy, morphology and ecology of lichenized fungi with laboratory emphasis on identification of the local species. Other topics for discussion will include symbiosis, air pollution and lichens, chemosystematics and modern herbarium techniques for lichens and other cryptograms.

Prerequisite: BIOL 1450/1750 and permission of instructor, graduate in biology. Crosslisted as: BIOL 4350.

## BIOL 8376 - Phycology (3)

A survey of the algae dealing with their ecology, morphology, physiology, taxonomy and evolution.

Prerequisite: BIOL 1450/1750 or permission of instructor, graduate in biology. Crosslisted as: BIOL 4370.

## BIOL 8386 - Morphology of Non-Vascular Plants (4)

Structural, reproductive, ecological and evolutionary features of the major non-vascular plant groups including prokaryotes, algae, fungi, lichens and bryophytes.
Prerequisite: BIOL 1450-1750, graduate. Crosslisted as: BIOL 4380.

## BIOL 8396 - Vascular Plant Morphology (3)

A survey of living and fossil vascular plants with emphasis on their comparative anatomy and morphology and their evolution.

Prerequisite: BIOL 1450-1750 or equivalent, graduate in biology. Crosslisted as: BIOL 4390.

## BIOL 8436 - Biology of Fungi (3)

A functional and developmental approach to the study of fungi. Fungal structure, growth, physiology and biotic interactions will be examined.

Prerequisite: BIOL 1450-1750, graduate. Crosslisted as: BIOL 4430.

## BIOL 8446 - Plant Physiology (4)

A study of plant processes and functions with emphasis on photosynthesis, growth and development, metabolism and mineral nutrition.

Prerequisite: BIOL 1450/1750, organic chemistry, or permission of instructor. Crosslisted as: BIOL 4440.

## BIOL 8456 - Virology (4)

This course will examine the morphology, genetics, pathogenesis and molecular biology of viruses. The course will emphasize the application of viral systems to molecular biology research. Current topics in virology, such as HIV and prions, will also be examined.

Prerequisite: CHEM 2260 and 2274 or CHEM 2210 and 2214, BIOL 3020 and 2140. Recommended: Biochemistry. Crosslisted as: BIOL 4450.

## BIOL 8535 - Flora of the Great Plains (3)

The classification, identification and recognition of common vascular plants, including weeds, ornamentals and indigenous plants, found in the Great Plains.

Prerequisite: BIOL 1450-1750. Crosslisted as: BIOL 3530.

## BIOL 8576 - Paleobotany (4)

A comprehensive study of the biology and evolution of plants through geologic time, including fossil plant structure, function and paleoecology.

Prerequisite: BIOL 1450/1750, graduate status or permission of instructor. Crosslisted as: BIOL 4570.

## BIOL 8606 - GIS Applications for Environmental Science (1)

This course introduces the use of geographic information systems (GIS) and other geospatial tools for work in the fields of environmental science, ecology, and natural resource management. The course will develop a working knowledge of the common software and hardware tools used by ecologists through hands-on projects.

Prerequisite: BIOL 3340 or permission of instructor. Crosslisted as: BIOL 4600 and ENVN 4600.

BIOL 8635 - Plant Anatomy and Development (4)
A study of cells, tissues and organs of vascular plants with particular emphasis on internal structure of seed plants, their development, and structure-function relationships.

Prerequisite: BIOL 1450-1750. Crosslisted as: BIOL 3630.

## BIOL 8646 - Microbial Physiology (4)

Examination of physiological diversity found among microorganisms with an emphasis on experimental procedures and practical applications. Lecture and laboratory.

Prerequisite: BIOL 3020. Crosslisted as: BIOL 4640.

## BIOL 8654 - Biochemistry I Laboratory (1)

A laboratory course to help integrate the concepts learned in biochemistry lecture with the development of biochemistry laboratory skills.

Prerequisite: Permission of instructor; CHEM 2260 and 2274; and either CHEM 3350 or BIOL 3020. Crosslisted as: BIOL 4654 and CHEM 4654 and CHEM 8654.

## BIOL 8656 - Biochemistry I (3)

A study of the structure and function of biomolecules and biochemical reactions with an emphasis on enzymes and carbohydrate metabolism.

Prerequisite: Permission of instructor; CHEM 2260 and 2274; and either CHEM 3350 or BIOL 3020 (chemistry courses must have a grade of C or better). CHEM 8654 must be taken concurrently. (Fall). Crosslisted as: BIOL 4650 and CHEM 4650 and CHEM 8656.

## BIOL 8664 - Biochemistry II Laboratory (1)

A laboratory course to help integrate the concepts learned in biochemistry lecture with the development of biochemical laboratory skill, and to gain practical experience in experimental design.
Prerequisite: Permission of instructor; CHEM 4650 and 4654 or BIOL 4650 and 4654. Crosslisted as: BIOL 4664 and CHEM 4664 and CHEM 8664.

## BIOL 8666 - Biochemistry II (3)

A continuation of the study of the structure and function of biomolecules and biochemical reactions with an emphasis on metabolism of carbohydrates, lipid, amino acids and nucleotides, and the chemistry of signal transduction and genetic information transfer.
Prerequisite: Permission of instructor; CHEM 4650 and 4654 or BIOL 4650 and BIOL 4654. Crosslisted as: BIOL 4660 and CHEM 4660 and CHEM 8666.

## BIOL 8726 - Experimental Endocrinology (2)

Laboratory studies of the functions of the endocrine system emphasizing experimental techniques and laboratory experience.

Prerequisite: A course in endocrinology, concurrent registration in BIOL 8736, or permission of instructor. Crosslisted as: BIOL 4720.

## BIOL 8735 - Fauna of the Great Plains (3)

A survey of the common animal groups found in the Great Plains, including their evolution, ecology, distribution and specific adaptions to the environment of the temperate North American grasslands.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 3730.

## BIOL 8736 - Endocrinology (3)

A survey of endocrine physiology stressing the regulative and integrative roles of hormones, the control of hormone secretion and mechanisms of hormone action.

Prerequisite: Organic chemistry, vertebrate anatomy and physiology or permission of instructor. Crosslisted as: BIOL 4730.

## BIOL 8745 - Histology (4)

Analysis of the microscopic anatomy of tissues and organs, their adaptions and functional significance.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 3740.
BIOL 8746 - Animal Physiology (4)
A comprehensive study of animal function emphasizing mechanisms of regulation and control.
Prerequisite: BIOL 1750, vertebrate anatomy, organic chemistry and physics, or permission of instructor. Crosslisted as: BIOL 4740.

## BIOL 8786 - Vertebrate Zoology (4)

A study of the general biology of the subphylum vertebrata including the morphology, anatomy, physiology and ecology of vertebrate representatives.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 4780.

## BIOL 8796 - Mammalogy (4)

The biology of mammals, including their evolution, functional morphology, physiology, ecology, zoogeography, behavior, classification and identification with emphasis on North American groups. Field trips.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 4790.
BIOL 8826 - Introduction to Environmental Law and Regulations (3)
Seminar on environmental law and regulation. The course will address federal regulations, implementing instructions, legal principles and requirements. The major federal environmental laws, air and water quality, solid and hazardous waste, and pollution prevention and remediation will be discussed.

Prerequisite: Graduate and permission of instructor. Crosslisted as: ENVN 4820 and PA 4820 and PA 8826 and BIOL 4820 and GEOG 8826 and GEOG 4820.

## BIOL 8830 - Environmental Physiology (3)

A detailed study of selected dynamic environmental factors and mechanisms of physiologic adaptation by organisms of various taxa.

Prerequisite: General physics, algebra, animal physiology, or permission of instructor. Graduate.

## BIOL 8846 - Herpetology (4)

The biology of amphibians and reptiles, including their evolution, classification, anatomy, physiology, ecology, distribution and identification with emphasis on North American groups.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 4840.

## BIOL 8856 - Developmental Biology (4)

A study of the principles of development of multicellular organisms. Current concepts of interactions at the molecular, cellular and tissue levels will be included.

Prerequisite: BIOL 1450, 1750, 3020 and junior-senior, or permission of instructor. Crosslisted as: BIOL 4850.

## BIOL 8866 - Comparative Genomics (3)

BIOL 8866/ BIOL 4860 Comparative Genomics (3) This course will introduce fundamental concepts in genomics and genome comparison. Students will learn how genomes are constructed, how they evolve, how individual genomes are unique, and what genomic knowledge means in terms of human health and medicine.

Prerequisite: BIOL2140 Genetics; BIOL3020 Molecular Biology of the Cell; Or Permission of instructor. Crosslisted as: BIOL 4860.

## BIOL 8886 - Invertebrate Zoology (4)

A comprehensive study of the invertebrate animals.
Prerequisite: BIOL 1750. Crosslisted as: BIOL 4880.
BIOL 8900 - Scanning Electron Microscopy (3)
Theory and use of the scanning electron microscope with special emphasis on biological applications. Included will be all aspects of specimen preparation, microscope function, darkroom techniques and interpretation of micrographs. Laboratory will emphasize individual student projects.

Prerequisite: Graduate and written permission of instructor.

## BIOL 8916 - Protozoology (4)

The biology of protozoa, including their morphology, physiology, reproduction, genetics and ecology with emphasis on free-living groups.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 4910.

## BIOL 8926 - Parasitology (4)

Taxonomy, morphology, physiology, life history dissemination and control of the parasitic protozoans, helminths and arthropods.
Prerequisite: BIOL 1750. Crosslisted as: BIOL 4920.

## BIOL 8946 - Entomology (4)

The study of insects; their classification, morphology, physiology, behavior, life histories, ecology and evolution.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 4940.

## BIOL 8956 - Vertebrate Embryology and Anatomy (4)

Development and phylogeny of vertebrate organ systems. Dissection of major vertebrate types, and study of developmental stages from fertilized egg to adult condition.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 4950.

## BIOL 8966 - Advanced Genetics (3)

An in-depth consideration of topics in genetics, including the conceptual and molecular definition of a gene, cytogenetics, mutation, population genetics, developmental genetics, gene regulation and the application of genetics to other areas of biology.
Prerequisite: BIOL 2140 and 3020. Crosslisted as: BIOL 4960.

## BIOL 8986 - Ornithology (4)

An introduction to the general biology of birds, including their anatomy, physiology, behavior, ecology, classification and identification with emphasis on North American groups.

Prerequisite: BIOL 1750. Crosslisted as: BIOL 4980.

## BIOL 8990 - Thesis (1-6)

An original and independent research project written under the supervision of a faculty thesis advisory committee.

BIOL 8616 - Environmental Monitoring \& Assessment (3)

## BLST - Black Studies

## BLST 8020 - Race, Ethnicity, and American Culture (3)

This course explores two central themes, race and ethnicity, which have played a dominant role in the shaping of American society and American culture.

Prerequisite: BLST 1000, BLST 1100, or permission by the instructor. Crosslisted as: UBNS 8020.

## BLST 8040 - Afro-American Sociolinguistics (3)

The aim of this course is to examine Black American English (i.e., vernacular theory) and the contributions of
language to our understanding of sociolinguistic theory. The course demonstrates how Black American English reveals the complexities of the African American experience. The course also examines significant theories and arguments concerning the genesis, maintenance and social function of African American English.

Prerequisite: BLST 1000, BLST 1100, BLST 3950 or permission of instructor.

## BLST 8070 - Advanced African American Historiography (3)

The purpose of this course is to examine the conceptual and historical foundations of Afro-American historiography. To achieve this, the course takes as its point of departure the concept of vindication as it has traditionally been used by African American scholars, namely the conflict between white racism and the African American assertion of a counter identity.
Prerequisite: BLST 1000, BLST 1100, or permission of instructor

## BLST 8080 - Special Topics in Black Studies (3)

The content of this course will change periodically. Each time this course is offered it will focus, in detail and in depth, on some aspect of the black experience, such as language and dialect, historiography and historicity, theology and religion, musicology, literature, etc. Students may repeat this course as often as they like, as long as a specific subject is not duplicated.

Prerequisite: Graduate, bachelor's degree or permission of instructor.

## BLST 8096 - Black Studies Oral History (3)

The focus of this course is to examine the method, procedure, transcription and the use of oral history in black studies research. Emphasis will be directed toward describing and evaluating the variables of memory, history and cultural authority, to produce written source materials collected from oral interviews.

Prerequisite: BLST 1000, BLST 1100, BLST 3220, or permission by the instructor. Crosslisted as: BLST 4090.

## BLST 8205 - Black Nationalism and Pan Africanism (3)

A study of the development of movements for selfdetermination in Afro-America and analysis of various nationalistic conceptual frameworks in the Diaspora and on the continent.

Prerequisite: BLST 1000, BLST 2410, or permission by the instructor. Crosslisted as: BLST 3200.

## BLST 8266 - Women of Color Writers (3)

Women of Color Writers is designed to introduce graduate students to the multicultural, literary experience, creativity
and contributions of women of color writers to contemporary world literature.

Prerequisite: Graduate standing and majoring in Black Studies; minoring in Women's Studies or permission of instructor.

## BLST 8506 - Philosophy \& Theology of Martin L. King Jr. and Malcolm X (3)

Critical study and analysis of the major ideas and doctrines that formed the conceptual frameworks of these two men. These include: Cultural Pluralism, Self determination, PanAfricanism, Personalism, Satyagraha, Non-Violence, Civil Disobedience, Reform and Revolution.

Prerequisite: BLST 2420, BLST 3200 or permission by the instructor. Crosslisted as: BLST 4500.

## BLST 8560 - Black Leaders of the Twentieth Century

 (3)This course is an intellectual study of selected African American leaders of the 20th century, such as: Booker T. Washington, T. Thomas Fortune, Ida Wells-Barnett, W.E.B. DuBois, James Weldon Johnson, Marcus Garvey, Mary McLeod Bethune and Charles Hamilton Houston. Direct emphasis will focus on examining issues and schemes of race, gender and class, relative to the selected subjects and their participation in mass social movements.

Prerequisite: BLST 1000; BLST 2410; or permission by the instructor.

## BLST 8570 - Seminar in Black Studies (3)

This course introduces the student to the professional background of the academic field of Africana Studies. Among the topics to be covered are the predecessors to the current field, the main proponents of the intellectual traditions of Africana studies, the fundamental philosophical bases of the field, the key documents and texts, the professional journals and associations, the Afrocentric perspective and critique, and the protocols of academic and scholarly work in Africana studies.

Prerequisite: BLST 1000, BLST 1050, BLST 3950.

## BLST 8580 - Seminar in Research and Writings of W.E.B. DuBois (3)

This course examines the life and writings of W.E.B. DuBois, who stands as the most eminent intellectual produced by people of African descent in the United States. Perhaps, next to Cheikh Anta Diop, DuBois is the most respected and honored African scholar of the 20th century. Within the context of Western traditions, DuBois is in the top category of prodigious intellectuals developed in the West. He is the father of modern American sociology, the founder of reconstruction history, the leader in urban analysis, the first serious student of inter-racial relations, as well as a novelist, poet, playwright, and essayist.

Prerequisite: BLST 1000, BLST 1050, BLST 3950.

## BLST 8655 - Slavery and Race Relations in the

 Americas (3)This course focuses on the black experience in the Americas outside the U.S. Four major geographical areas are studies: Canada, Central America, the Caribbean and South America. Black life is considered with regard to historical background and geographical factors, and in comparison to white and native American experiences. An effort is made to trace common themes by using the cross cultural approach.

Prerequisite: BLST 1000, 2410, or permission by the instructor. Crosslisted as: BLST 3650.

## BLST 8706 - African Philosophy (3)

Explores ancient, traditional and contemporary philosophical/theological concepts and doctrines of Africans through an investigation of their cosmological, metaphysical, ontological, and ethical world view.

Prerequisite: BLST 1000, BLST 1050, BLST 3950; or permission by the instructor. Crosslisted as: BLST 4700.

## BLST 8855 - Black Oratory (3)

This course is intended to be an appreciation of African and Afro-American oratory, aesthetics and cultural tradition through a critical study of representative orations speeches of past and contemporary Black leaders in their socio-historical and political contexts. It will investigate the nature of their oratory and assess its role in the fight against slavery, colonialism, fascism and oppression.

Prerequisite: BLST 1260 or permission by the instructor. Crosslisted as: BLST 3850.

## BLST 8886 - Seminar on Black Leadership in America (3)

Designed as a senior and graduate seminar, this course will examine the meaning and attributes of effective leadership. The role of black leadership in the African American experience will be examined. Profiles of selected African American leaders and their political strategies also will be analyzed in the seminar.
Prerequisite: Senior or graduate student or instructor's permission. Crosslisted as: BLST 4880.

## BLST 8955 - Philosophy of Afro-Americans (3)

Examines both Afro-American philosophy proper, and the philosophical concerns of Afro-Americans generally through a treatment of their works.

Prerequisite: BLST 1000, BLST 1100 or permission by the instructor. Crosslisted as: BLST 3950.

## BRCT - Broadcasting

## BRCT 8316 - Political Broadcasting (3)

A study of the evolving role of the electronic media in shaping political activities in our contemporary democratic society.

Crosslisted as: BRCT 4310.

## BRCT 8346 - Media Regulation \& Freedom (3)

Media and Internet regulation and free expression as defined and interpreted through First Amendment rights, prior restrain and obscenity case law, advertising and public relations, broadcast and cable TV regulation and deregulation policy, new telecommunication media, and privacy.

Prerequisite: ENGL 1160 and Junior standing. Crosslisted as: BRCT 4340.

## BRCT 8356 - Mass Communication Research (3)

Field and lab quantitative research methods. Students develop and conduct a mass media research project.

Crosslisted as: BRCT 4350 and BRCT 4350.

## BRCT 8386 - Film Theory and Criticism (3)

Study of major trends in film criticism and theory in Europe and America, with concentrated analysis of selected films.

Crosslisted as: BRCT 4380 and BRCT 4380.
BRCT 8306 - Electronic Media Management (3)

## BSAD - Business Administration

## BSAD 8000 - Quantitative Analysis (3)

This course will include an overview of scientific methodology and quantitative tools used in problem solving and decision-making process in business and other organizations.

Prerequisite: Admission to the Graduate College and BSAD 3160, Managerial Statistics for Business, or equivalent course.

## BSAD 8010 - Legal, Social and Ethical Environment (3)

Focus upon law and ethics. Business law, legal processes, and regulation will be the subject matter focus. Business ethics will be a recurring focus of analysis. Analysis of the social environment will include public policy. Both subject matter and analysis will be integrated to build the student's critical thinking skills.

Prerequisite: Completion of MBA foundation requirements and BSAD 8060 (BSAD 8060 prior to or concurrent); or admission to the MAcc program. Students with an
undergraduate major or a graduate degree in law may not include this course in a plan of study for the MBA degree.

## BSAD 8020 - Environmental Economics and Management (3)

This course covers topics related to environmental economics and policy, with an emphasis on comparative policy analysis and business strategies towards the environment.

Prerequisite: Intermediate Microeconomics (ECON 3200) or Managerial Economics (ECON 8210, BSAD 8100), or permission of the instructor. Crosslisted as: ECON 8020.

## BSAD 8026 - Research Methods in Economics and

 Business (3)Covers the methodology of economics: choosing a research topic, literature search tools, data source identification, data summary techniques, basic statistical data analysis using statistical packages, and clear economics writing. The student will become familiar with these techniques through text materials, journal studies, and completion of an empirical economics paper.

Prerequisite: Econ 2200 (Principles of Economics--Micro); Econ 2220 (Principles of Economics--Macro); For grad: graduate standing. Crosslisted as: ECON 8296 and ECON 4290.

## BSAD 8030 - Information Technology in Business (3)

The premise of this course is that today's managers must learn to use information technology to create competitive firms, manage global corporations and provide useful products and services to customers. Accordingly, the content of this course is focused on use of information technology for competitive advantage. Students will develop case studies of firms who have achieved this objective. Furthermore, the course will address emerging technologies and their current and potential application.
Prerequisite: Completion of MBA foundation courses and BSAD 8060 (BSAD 8060 prior to or concurrent). Students with an undergraduate major or a graduate degree in management information systems may not include this course in a plan of study for the MBA degree.

BSAD 8040 - Applied Quantitative Analysis (3)
A survey of quantitatively oriented models and techniques applied to a variety of business problems in a case study format.

Prerequisite: BSAD 8000 and graduate.

## BSAD 8050 - Business Conditions Analysis (3)

This course is concerned with the statistical measurement and evaluation of general business conditions, and the adaptation of business policies to changing business conditions. Emphasis is placed upon the practical application of the statistical techniques of analysis to the
business situation, within the framework of the aggregate economy.

Prerequisite: ECON 2200 or BSAD 8180.

## BSAD 8060 - Essential Leadership Skills (3)

This course will teach students the interpersonal skills necessary to effectively manage others. Second, this course will serve as a vehicle to assess the business content knowledge and computer literacy of incoming MBA students in order to provide customized remediation recommendations for each student. Third, the course will collect information that will be used for assessment and accreditation purposes to evaluate the effectiveness of the MBA program. This course will address the following MBA program themes: communication, change agent, teamwork, information technology, critical thinking and information gathering and analysis.

Prerequisite: Admission to the MBA program and completion of MBA foundation courses (or equivalent) or may be taken concurrently with the final foundation course.

## BSAD 8070 - Applied Multivariate Statistics (3)

This course is designed to acquaint students with a variety of multivariate statistical techniques used in the analysis of business situations.

Prerequisite: BSAD 3160 or equivalent, and admission to the Graduate College.

## BSAD 8080 - Business Forecasting (3)

This course includes a comprehensive survey of forecasting methods and in-depth study of selected techniques most commonly used in business environments. Emphasis is given to an application and therefore students will be required to develop forecasting models and test their performance as part of their course.
Prerequisite: Admission to Graduate College and one semester of statistics. Crosslisted as: ECON 8310.

BSAD 8096 - Principles of Collaboration (3)
Students will work with techniques for team leadership, interpersonal collaboration, consensus-building, creative problem solving, negotiation, facilitation, group process design, collaborative workspace design, and collaboration engineering. Students will gain hands-on experience with collaboration technologies.

Prerequisite: For 4090: Sophomore standing or permission of instructor. Crosslisted as: MGMT 4090.

## BSAD 8100 - Managerial Economics (3)

The course will offer students tools of analysis drawn from consumer theory and the theory of the firm in order to improve the understanding of human behavior as it is constrained in the context of business decision- making.

This course is intended for students who are seeking the degree of Master of Science in Economics or the degree of Master of Business Administration.

Prerequisite: ECON 2200 and 2220 or BSAD 8180 and BSAD 8060. BSAD 8060 may be taken prior to or concurrent. Students with an undergraduate major or a graduate degree in economics may not include this course on their plan of study for the MBA degree. Crosslisted as: ECON 8210.

## BSAD 8110 - Accounting and Financial Fundamentals (3)

The course is designed to give incoming graduate students the foundation in accounting that is necessary for subsequent graduate courses. Emphasis is on introducing the students to as many accounting concepts as possible.

Prerequisite: Graduate admission or permission of the appropriate graduate advisor. This course cannot be used in a plan of study for any graduate program at UNO.

## BSAD 8180 - Analytical Foundations of Economics (3)

To familiarize students with the basic economic theory and policy analysis (principles level) required to analyze economic problems and to understand and evaluate recommendations designed to solve those problems. This is a course for students and professionals seeking a degree of Master of Business Administration with little or no formal background in economics.

Prerequisite: Graduate. This course cannot be used in a plan of study for any graduate program at UNO.

## BSAD 8200 - Managerial Accounting (3)

A study of concepts, analysis and procedures of accounting utilizing internal financial and non-financial data which provides management with information for planning and controlling routine operations, for non-routine decisions, policy-making and long-range planning; and for external reporting to stockholders, governments and interested parties.

Prerequisite: ACCT 2010 and 2020 or BSAD 8110, and BSAD 8060. BSAD 8060 may be taken prior to or concurrent. Students with an undergraduate major or graduate degree in accounting may not include this course on their plan of study for the MBA degree.

## BSAD 8240 - Leadership Development (2)

This course aims to enhance the leadership effectiveness of students in UNO's Executive MBA program. Feedback provided from leadership assessment activities will be used in concert with discussions of leadership and leadership development to enable the Executive MBA student to prepare an effective leadership development plan.

Prerequisite: Admittance to UNO's Executive MBA program.

## BSAD 8260 - Accounting Theory and Practice (2)

This course is designed to enhance students' understanding of financial statements and how executive decisions can influence these statements. Financial statements, including footnotes and explanatory material, are the primary instruments utilized by parties external to the enterprise in making judgments about the enterprise. By understanding how management decisions are reflected in the financial statements, managers will understand how they can influence their judgment.

Prerequisite: Admittance to the Executive MBA Program and graduate.

## BSAD 8270 - Contemporary Economics for Business Management (3)

Only students who have been admitted to the Executive MBA program may take this course. This course will familiarize students and professionals with the microeconomic and the macroeconomic principles relevant to: (a) individual and business firm decision-making; (b) the domestic and international environment in which economic decisions are made; (c) the evaluation of policies designed to solve economic problems.

## BSAD 8280 - Stewardship of the Firm's Resources: Human Resources and Change Management (4)

Only students who have been admitted to the Executive MBA program may take this course. This course provides 1) a comprehensive review of effective human resource theory and practice with an emphasis on managerial influence on attracting, retaining, developing, and rewarding employees (8280a) and 2) a theoretical, as well as pragmatic approach, to Change Management for executive and senior level leaders in all types of organizations. Focus is given to understanding organizational structure, managing culture, and critical components of senior level management effectiveness in leading change.

Prerequisite: Enrollment in the Executive MBA program.

## BSAD 8290 - Marketing Management (3)

Only students who have been admitted to the Executive MBA program may take this course. As this course is the initial course of marketing in the degree program, it establishes the basic foundation of the marketing discipline as well as provides the basis for further exploration and study of the discipline of marketing. The foundation of principles, concepts and nomenclature of marketing are the primary structure of the course. It is intended to provide a comprehensive knowledge of marketing. Further, the course challenges the students to explore further the applications of the foundation knowledge of the course.

## BSAD 8300-Organization Theory and Design (3)

A study of theories and guidelines for enhancing organizational effectiveness by matching an organization's structure to its environment, strategy, technology and size.
Prerequisite: Graduate.

## BSAD 8310 - Managing Performance in Organizations

 (3)A human behavior course emphasizing the areas of individual behavior, interpersonal behavior, group behavior and the interplay of human and non-human factors.

Prerequisite: Essential Leadership Skills (BSAD 8060) or admission to the MAcc program.

## BSAD 8320 - Seminar in Human Resource Management (3)

Extensive treatment of the relevant developing theories and coverage of certain new methods, techniques and procedures that relate to personnel administration and human resource management. Efforts are made to select and present material to illustrate the practical, applied aspects of resource management and personnel administration, as related to human problems in organizations.

Prerequisite: Graduate.

## BSAD 8326 - Sales Management (3)

The student will be exposed to the current research findings in sales management and to business cases where the theories and concepts will be applied. The cases will come from either academic sources such as the Harvard Business School or from business owners and managers from the local business community.

Prerequisite: Admission to Graduate College, MBA
Program or by permission of the instructor. Crosslisted as: MKT 4320.

## BSAD 8340 - International Business Study Abroad (3)

This course provides students with an international business and cultural experience through a study tour in a selected international location. Students will develop an understanding of the factors that affect international business decisions by visiting American companies operating abroad and foreign companies that export goods and services to the U.S. Typically, travel is conducted during Spring Break.

Prerequisite: Instructor Permission.

## BSAD 8350 - Seminar in Management (3)

A student participation course emphasizing current issues and problems in the areas of management theory and operation.

## Prerequisite: Graduate.

## BSAD 8360 - Financial Management for Executives (3)

Only students who have been admitted to the Executive MBA program may take this course. This course is an introduction to corporate financial management. Lectures and case studies will be used to acquaint the student with financial decision-making involving such topics as capital budgeting, working capital management, financial statement analysis, capital structure, policy and others.
Prerequisite: Graduate in the Executive MBA program.

## BSAD 8366 - E-Marketing (3)

The focus of this course is understanding the Internet as a marketing tool. The content includes discussion of how the Internet is used by businesses for designing products, pricing, promotions, and distributions thereof. The larger impact of the Internet on businesses and future trends also is discussed.

Prerequisite: BSAD 8400 with a grade of 'B' or above. Crosslisted as: MKT 4360.

## BSAD 8370 - Legal and Ethical Considerations in Business (3)

Only students who have been admitted to the Executive MBA program may take this course. A comprehensive examination of the existing structure and mechanisms used to resolve disputes in the United States, which allows the student to understand the strengths and weaknesses of this system. It will specifically examine the body of substantive law that affects management, including court decisions, statutes (federal and state), traditional ethical theories as they relate to the law, and international problems that exist in the legal environment.

## BSAD 8380 - Quality \& Process Management (2)

The objective is to look at a broad spectrum of knowledge and techniques used in POM, including (1) strategic decisions that deal with long term aspects of production and service organizations, (2) tactical decisions that are adaptive in nature, and (3) control decisions that deal with the day to day production problems.
Prerequisite: Enrolled in the Executive MBA program.

## BSAD 8390 - Contemporary Accounting Systems: Management Accounting (3)

Only students who have been admitted to the Executive MBA program may take this course. The course is designed to give students an in-depth understanding of how accounting information isused by management decision-makers. The accounting information system generates information managers use for pricing, budgeting, performance appraisal, purchasing production, capital acquisition, etc. The course focuses on both theoretical and practical dimensions of the topic.

## BSAD 8400 - Marketing Policies (3)

This course provides an introduction to the fundamental concepts of marketing, including a customer orientation, matched with attention to competition and core strengths. The course will illustrate strategies and principles that will help you understand how marketing managers, product managers or service managers must think through their situations, determine their goals and lay a course to achieve those goals.
Prerequisite: Completion of MBA foundation courses and BSAD 8060 (BSAD 8060 may be taken prior to or concurrent); or admission to MAcc program.

## BSAD 8426 - Business Demographics (3)

The development of a demographic perspective to assist in understanding the business environment and business policy. How population change impacts upon consumer markets and all of the functions (for example, accounting, finance and management) that must exist for these markets to perform. Includes a history of population change and policy as well as a view toward international population considerations.

Prerequisite: Graduate standing. Crosslisted as: MKT 4420.

## BSAD 8430 - Strategic Brand Management (3)

An exploration of the characteristics, meanings, and management of brands in the business world. The course examines brands as a strategic asset, and draws on managerial, consumer, and cultural perspectives. Learning outcomes include the ability to: 1) know and understand concepts of brand management, 2) understand the relationship between brand management and brand equity, 3 ) understand the value of a brand, 4)understand how to build, measure, and manage brand equity, and 5) understand the importance of brands as a strategic asset and as a source of competitive advantage.

Prerequisite: BSAD 8400 or permission of instructor.

## BSAD 8450 - Seminar in Marketing (3)

Exploration, study and critical analysis of contemporary marketing problems, trends, methods and approaches for seminar discussion and written report.

Prerequisite: Graduate.

## BSAD 8460 - Management and Organization Theory (3)

Only students who have been admitted to the Executive MBA program may take this course. A systematic analysis of the principles and concepts of organization and management theory including the basic process of management and the fundamentals of organization design. From a micro perspective, the course focuses on the planning, organizing, directing and controlling functions of
management with emphasis on the classical, neoclassical, behavioral and systems schools of thought. From a macro perspective, the course focuses on the relationships between such factors as environment, goals, strategy, management process and organizational structure.

## BSAD 8470 - Investment Management for Executives

 (3)Only students who have been admitted to the Executive MBA program may take this course. Investigation of the principles involved in building an investment portfolio of securities, and financial analysis of securities, and in learning practices of the securities markets.

## BSAD 8480 - Applications in Economics (3)

Only students who have been admitted to the Executive MBA program may take this course. This course will teach students analytical techniques based on the theory of the firm for application to business management decisions. Emphasis will be placed upon bridging the gap between economic theory and management practice. The student will learn to evaluate the impact on the firms of national and international market conditions and policies.

## BSAD 8490 - IT: Leveraging Technology for Competitive Advantage (2)

The premise of this course is that today's executives and managers must learn to use information technology to create competitive firms, manage global corporations and provide useful products and services to customers. Accordingly, the content of this course is focused on use of information technology for competitive advantage. Students will develop case studies of firms who have achieved this objective. Furthermore, the course will address emerging technologies and their current and potential application.

Prerequisite: Only students who have been admitted to the Executive MBA program may take this course.

## BSAD 8500 - Financial Management (3)

This course is an introduction to corporate financial management. Lectures and case studies will be used to acquaint the student with financial decision-making involving such topics as capital budgeting, working capital management, financial statement analysis, capital structure policy and others. This course is required for all students working toward the Master of Business Administration degree.

Prerequisite: Completion of MBA foundation requirements and BSAD 8060, 8100 and 8200; or admission to the MAcc program. Students with an undergraduate major or a graduate degree in finance may not include this course in a plan of study for the MBA degree.

## BSAD 8510 - Security Analysis (3)

Study of the efficient market, fundamental and technical analysis approaches for the valuation of marketable securities. Methods of analysis are considered for the economy, industry groups and individual corporations.

Prerequisite: BSAD 8500.

## BSAD 8520 - Seminar in Investment Management (3)

Modern Portfolio Theory of Investment Management and its application in formulation of policies for individuals and institutional investors. Qualitative and quantitative analysis of the risks and returns of portfolio management using efficient market, fundamental and technical analysis approaches.
Prerequisite: BSAD 8510.
BSAD 8530 - Banking \& Financial Markets: Structure, Function, \& Policy (3)

A comprehensive study of the structure and functioning of financial firms and markets; recent policies affecting the financial system; proposals for structural and functional changes of the financial system.

Prerequisite: BSAD 8500.

## BSAD 8540 - Multinational Financial Management (3)

The focus of this course is on multinational financial management as viewed and practiced by the multinational firm and on current developments in international financial markets, including global banking. Familiarity with certain areas of the firm's environment, such as the international monetary system, the European Monetary System, and determination of exchange rates under alternative regimes, is essential to the international financial manager.
Prerequisite: BSAD 8500 (Financial Management) or its equivalent, or by approval of instructor.

## BSAD 8550 - Seminar in Finance (1-3)

Selected topics from areas of business finance.
Prerequisite: BSAD 8500.

## BSAD 8560 - Marketing Strategies (3)

This course provides students with a comprehensive knowledge of marketing strategies in both domestic and international markets.

Prerequisite: Graduate in the Executive MBA program.

## BSAD 8566 - State and Local Finance (3)

Theoretical and policy analysis of state and local government fiscal behavior. Revenues, expenditures, borrowing and intergovernmental fiscal relations. Applications to education, transportation, and economics development.

Prerequisite: ECON 2200 and 2220 or BSAD 8180. Crosslisted as: FNBK 4560.

## BSAD 8570 - Administrative Policy and Strategy (3)

Only students who have been admitted to the Executive MBA program may take this course. This course examines the executive decisions required of the chief operating officer of an organization. Emphasis is given to the contributions of several business disciplines of study, such as marketing, finance and management, to understanding both the internal operations of the organization and the influences of the external environment. This course is integrative and introduces both the theory and practice that enables that integrative process.

## BSAD 8580 - International: Competing in Global Markets (3)

Students will develop an understanding of the evolution of the global political economy, challenges faced when operating in the global business environment, and how to evaluate the risks and returns of global expansion. Students will also learn how to effectively communicate in international settings, to successfully manage international conflicts and to conduct effective cross-border business negotiations.

Prerequisite: Enrollment in the Executive MBA Program.

## BSAD 8590 - Seminar in Business Administration (3)

This course hosts the international business consulting project. Both a theory and a practical course, it examines opportunities and challenges for a domestic U.S. firm or industry attempting to enter or expand its presence in an international market. Emphasis is placed on developing focused and appropriate research objectives, the collection and analysis of data for decision-making, development and evaluation of strategy alternatives, and on the production and presentation of a professional, prescriptive consulting report.

Prerequisite: Graduate in the Executive MBA program. Normally, all course work in the Executive MBA Program will have been completed within one month of beginning this course.

## BSAD 8596 - Risk Management For Business Managers

 (3)An analysis of risk management techniques for handling the risk exposures most businesses face, including insurance, self insurance, risk control, and risk avoidance, among others.

Prerequisite: Graduate. Crosslisted as: FNBK 4590.
BSAD 8600 - Real Estate and Land Use Economics Theory (3)

This course brings together the best of the technical literature dealing with the development of advanced tools
of analysis and concepts of Real Estate and Land Use Economics. The tools are presented and developed which assist real estate decision-makers in identifying and evaluating professionally the complex factors which determine real estate productivity, value, investment and land-use patterns.

Prerequisite: ECON 2200 and 2220 or BSAD 8180.

## BSAD 8606 - Financial Risk Management (3)

The course provides students with an intermediate level analysis of financial derivatives, and the use of these instruments for managing risk in financial institutions.

Prerequisite: BSAD 8500 and 8510 or their equivalent, and graduate standing. Crosslisted as: FNBK 4600.

## BSAD 8610 - Current Problems in Real Estate and Land Use Economics (3)

A study of current problems in real estate markets affecting decision policies in the private and public sectors. Analysis of economics of land development and use and re-use of real property to provide a viable environment for all citizens.

Prerequisite: RELU 2410, 4400, 4410 and LAWS 3460 or equivalent experience.

## BSAD 8620 - Valuation of Intellectual Property (3)

Intellectual Property (IP) is critical to business success. Accounting, economics, and finance all struggle to quantify 'value' of individual IP (e.g., trademark) and bundles of IP (e.g., patent pool). Value depends on the context (e.g., infringement versus depreciation versus sale). This course focuses on application of theory.
Prerequisite: BSAD 8010 or BSAD 8100 or BSAD 8110 or BSAD 8500 , or its equivalent.

## BSAD 8706 - Economics of eBusiness (3)

The course will be conducted mainly as a seminar with ample student participation, including a research paper. A 'New Economy' has often been identified with the rise of ebusiness. We will examine whether the rise of e-business has brought with it a change in the rules of the economy, and we will look at the effects of e-business on business, labor, consumers, and the stock market.

Prerequisite: Admission to the MBA program or the Economics graduate program. Crosslisted as: ECON 4700 and ECON 8706.

## BSAD 8736 - Economics of Entrepreneurship (3)

This course will review economic theories of entrepreneurship with special emphasis on Schumpeter's theory of creative destruction. The main focus of the seminar will be on the "high-level" entrepreneurship that sometimes results in major innovations. This course will address the societal benefits of entrepreneurship, factors
influencing entrepreneurial success, the policies that best encourage entrepreneurship, and how firms can survive and prosper in an entrepreneurial environment.

Prerequisite: ECON 2200 or permission of the instructor for all students. Crosslisted as: ECON 4730 and ECON 8736.

## BSAD 8750 - Telecommunications in Business (3)

This course is designed to introduce students to basic technology of modern telecommunications, including voice, data and video, as well as the contemporary issues of telecommunication policy. In addition, the course will address managerial issues of modern telecommunications in business.

Prerequisite: Graduate.

## BSAD 8800 - Policy, Planning and Strategy (3)

A comprehensive study of business problems, prospects and opportunities at varying levels of organizations. The student is responsible for demonstrating interrelationships between the various disciplines of study. Only an 'A' or 'B' is considered an acceptable grade.
Prerequisite: Prior completion of BSAD 8010, 8030, 8060, 8100, 8200, 8310, 8400 and 8500 . Permission needed from MBA Advisor for enrollment in summer sessions.

BSAD 8810 - Applied Strategic Leadership (3)
Applied and integrative course in the MBA program, with an emphasis on field experiences when possible.

Prerequisite: Concurrent enrollment in, or completion of, BSAD 8060.

## BSAD 8880 - The Arts and the Executive (3)

The course will provide the graduate student with an understanding of the organizational and managerial issues involved in an arts organization as the role of the arts in the business community.
Prerequisite: Graduate. Crosslisted as: FINA 8010.

## BSAD 8900 - Independent Research (1-6)

Individual research in an academic area in business administration.

Prerequisite: Graduate and permission of MBA Advisor. Requires submission of completed Independent Study Contract to MBA Advisor prior to registration.

## BSAD 8910 - Special Topics in Business (1-3)

May be repeated up to (6). A series of special courses each designed to focus on current major topics and developments in a specific area of economics or business, scheduled as a workshop or seminar according to purpose.
Prerequisite: Graduate in good standing and as indicated for specific workshop or seminar.

## BSAD 8916 - Special Topics in Economics (1-3)

(May be repeated up to 6) A series of special courses each designed to focus on current major topics and developments in a specific area of economics or business, scheduled as a workshop or seminar according to purpose.
Prerequisite: Graduate student in good standing or advanced undergraduate student and as indicated for specific workshop or seminar. Crosslisted as: ECON 8916 and ECON 4910.

## BSAD 8990-Thesis (1-6)

A research project, under the supervision of a faculty thesis adviser in the College of Business Administration, in which the student establishes his capacity to design, conduct and complete an independent, scholarly investigation of a high order of originality. The research topic and the completed project must be approved by the student's faculty thesis adviser and two other faculty members, one of whom must be from outside the program area.

Prerequisite: Permission of graduate adviser.

## CCSI

CSCI 8350 - Data Mining \& Data Warehousing (3)
CCSI 8566 - Number Theory \& Cryptography
CEEN Computer Electronics
Engineering

## CEEN 8150 - Digital Image Processing (3)

Topics covering the spatial and spectral analysis of digital image processing systems, the design of multi-dimensional digital filters and systems, and advanced theories and technologies in digital image processing systems.

Prerequisite: CEEN 4240/8246 or permission.

## CEEN 8246 - Digital Signal Processing (3)

The temporal and spectral analysis of digital signals and systems, the design of digital filters and systems, and advanced systems including multi-rate digital signal processing techniques.
Prerequisite: CEEN 3550. Crosslisted as: CEEN 4240.

## CEEN 8516 - Introduction to VLSI System Design (3)

The concepts, principles, and methodology at all levels of digital VLSI system design and focused on gate-level VLSI implementation.
Prerequisite: CEEN 3100. Crosslisted as: CEEN 4510.

## CEEN 8526 - Introduction to Computer-Aided Digital Design (3)

The concepts, simulation techniques and methodology in computer-aided digital design at system and logic levels.

Prerequisite: CEEN 3100. Crosslisted as: CEEN 4520.
CEEN 8666 - Telecommunication Engineering I (4)
Standard telecommunications protocols, architecture of long distance integrated data networks, local area networks, wide area networks, radio and satellite networks. Network management, internetworking, system modeling and performance analysis.

Prerequisite: CEEN 3610; CEEN 4630/8636 prior to or concurrent. Crosslisted as: CEEN 4660.

## CEEN 8800 - Random Processes in Engineering (3)

Topics related to the concept of random variables, functions of random variables and random processes.

Prerequisite: STAT 3800.

## CEEN 8860 - Spread Spectrum Communications (3)

Introduction to the theory of spread spectrum communications: direct sequence, frequency and time hopping techniques. Topics include properties of pseudorandom binary sequences, low-probability-of-intercept (LPI) and anti-jamming (AJ) methods, performance of spread spectrum systems, applications of spread spectrum techniques in radio frequency and optical code-division multiple access (CDMA) systems.

Prerequisite: CEEN 4630/8636 or permission.

## CEEN 8926 - Individual Study in Computer \& Electronics Engineering IV (1-3)

Individual study at the senior level in a selected computer or electronics engineering area under the supervision and guidance of a Computer and Electronics Engineering faculty member.

Prerequisite: Senior or graduate standing and departmentally approved proposal. Crosslisted as: CEEN 4920.

## CEEN 8930 - Independent Study in Computer and Electronics Engineering (1-3)

Individual study at the graduate level in a selected computer or electronics engineering area under the supervision and guidance of a Computer and Electronics Engineering faculty member.

Prerequisite: Departmentally approved proposal.

## CEEN 8950 - Special Topics (1-3)

Special topics in the newly emerging areas of computer and electronics engineering not covered in the other
courses in the computer and electronics engineering curriculum.

## CEEN 8990 - Masters Thesis (1-6)

Masters thesis work.
Prerequisite: Admission to masters degree program and permission of supervisory committee chair.

## CEEN 9260 - Statistical Signal Processing for Wireless Communications (3)

Statistical signal processing and applications for wireless communications covering the characterics of random signals, optimum linear filters, statistical parameter estimation using maximum likeihood (ML) and minimum mean-square error (MMSE) methods, adaptive signal processing using least-mean-square (LMS) and recursive least-square (RLS) approaches, Kalman filtering, and eigenanalysis algorithms. Applications of the statistical signal processing techniques in wireless communications will be explored.

Prerequisite: CEEN 4240 or 8246 , CEEN 4760 or 8766 , and CEEN 8800.

CEEN 9770 - Space-Time Wireless Communications (3)
Theory of space-time (ST) wireless communication systems. Emphasis will be placed on spatial diversity, smart antenna systems, MIMO capacity of multi-antenna fading channels, space-time signaling, space-time receivers and interference mitigation. Includes overview of more advanced topics such as MIMO-OFDM and current trends in research and industry.

Prerequisite: CEEN 4630, CEEN 4760.
CEEN 9790 - Non-Linear Fiber Optic Systems (3)
Linear and non-linear propagations in optical fibers. Topics include fiber non-linearity, fundamentals of optical amplifiers, semiconductor and fiber amplifiers, soliton communications. Applications include high capacity and long distance transmissions, all-optical networks.

Prerequisite: CEEN4790/8796 or permission.

## CEEN 9920 - Research Other Than Thesis (1-6)

Supervised non-thesis research and independent study.
Prerequisite: Permission and graduate standing.

## CEEN 9980 - Advanced Special Topics (1-3)

Advanced topics in computer and electronics engineering not covered in other 9000 level courses.

Prerequisite: Permission.

## CEEN 9990 - Doctoral Dissertation (1-24)

Dissertation research.

Prerequisite: Admission to doctoral degree program and permission of supervisory committee chair.

## CET - Construction Engineering Technology

## CET 8200 - Professional Practice and Ethics (3)

Orientation to professional practice through the designers' and the contractors' relationships to society, specific clients, their professions, and other collaborators in environmental design and construction fields. Ethics, professional communication and responsibility, professional organization, office management, construction management, professional registration, and owner-designer-contractor relationships.
Prerequisite: Senior Standing.
CET 8340 - Professional Trends in Design/Build (3)
The organization, managerial, ethical and legal principles in the delivery of design build as a construction project delivery system.
CET 8980 - Special Topics in Construction (1-6)
Special issues, topics, or research in construction.
Prerequisite: Permission.

## CHEM - Chemistry

## CHEM 8040 - Seminar in Teaching Advanced

 Placement Chemistry (2)This course provides an introduction to the Advanced Placement high-school chemistry course and includes instruction on content and methods specific to teaching an Advanced Placement chemistry course. Emphasis will be placed on subject content and adaptations of college-level laboratory experiments to the high-school level.

Prerequisite: Concurrent enrollment in the Advanced Placement Chemistry Institute at UNO and current employment as a high-school science teacher or instructor permission.

## CHEM 8236 - Advanced Organic Chemistry -Synthesis

 (3)An advanced lecture course in modern theories and special topics in organic chemistry.

Prerequisite: CHEM 2260 and 3360/8365 with a grade of C or better or may be taken concurrently, or graduate. Crosslisted as: CHEM 4230.

## CHEM 8246 - Advanced Organic Chemistry Mechanism (3)

An advanced lecture course in organic chemical reactions.

Prerequisite: CHEM 2260 and 3360/8365 with a grade of C or better or may be taken concurrently, or graduate. Crosslisted as: CHEM 4240.

## CHEM 8316 - Polymer Chemistry (3)

An introduction to the chemical and physical properties of polymers. Emphasis will be on physical properties and structure/property relationships. Topics will include kinetics and synthesis. Students will gain an understanding of the characteristics of polymers and their applications.

Prerequisite: CHEM 2260 and CHEM 3350 with a grade of C or better, or instructor permission.

## CHEM 8355 - Physical Chemistry I (3)

A presentation of selected topics from the areas of classical thermodynamics and electrochemistry.

Prerequisite: CHEM 2260, 2264 or 2274, 2400, 2404, PHYS 2120, MATH 1960 (chemistry courses must be with a grade of C or better). (Fall). Crosslisted as: CHEM 3350.

## CHEM 8365 - Physical Chemistry II (3)

A presentation of selected topics from the areas of quantum mechanics, spectroscopy, kinetics and statistical mechanics.

Prerequisite: CHEM 3350/8835, 3354/8359 with a grade of C or better. (Spring). Crosslisted as: CHEM 3360.

## CHEM 8369 - Physical Chemistry II Laboratory (1)

Physical chemistry laboratory to be taken concurrently with CHEM 3360.

Prerequisite: CHEM 3350, 3354 with a grade of C or better. (Spring). Crosslisted as: CHEM 3364.

## CHEM 8406 - Instrumental Analysis (3)

Study of instrumentation for use in quantitative and trace analysis. Advanced instrumental methods and electronics for instrumentation are included.

Prerequisite: CHEM 3360/8365, 3364/8369, 3414/8419 with a grade of C or better. (Spring). Crosslisted as: CHEM 4400.

## CHEM 8409 - Instrumental Analysis Laboratory (1)

Investigation of instrument performance and use of instrumentation in quantitative and trace analysis to be taken concurrently with CHEM 4400/8406. Advanced instrumental methods and electronics for instrumentation are included.

Prerequisite: CHEM 3360/8365, 3364/8369, 3414/8419 with a grade of C or better. (Spring). Crosslisted as: CHEM 4404.

## CHEM 8419 - Instrumental Methods (1)

Laboratory course involving use of modern instrumentation to conduct analytical determinations following standard methods. Topics include use of standards, field sampling and sample storage.
Prerequisite: Graduate and CHEM 2400, 2404 with a grade of C or better or equivalent. Crosslisted as: CHEM 3414.

## CHEM 8429 - Spectrometric Characterizations (1)

Laboratory course involving the use of spectrometric instrumentation for the identification of compounds containing organic functional groups.

Prerequisite: CHEM 2260, 2274, 2400 and 2404 with a grade of C or better. (Fall, alternate years). Crosslisted as: CHEM 3424.

## CHEM 8506 - Advanced Inorganic Chemistry (3)

Theories of chemical bonding, the determination of chemical structures and the application of modern chemical theory to classical and recent problems in inorganic chemistry.

Prerequisite: CHEM 2500, 3360/8365 with a grade of C or better or may be taken concurrently, or graduate. (Spring). Crosslisted as: CHEM 4500.

## CHEM 8519 - Inorganic Preparations (1)

Laboratory preparation and characterization of representative types of inorganic compounds by various standard and special techniques.

Prerequisite: CHEM 2274, 2400, 2404, 2500 with a grade of C or better.

## CHEM 8654 - Biochemistry I Laboratory (1)

A laboratory course to help integrate the concepts learned in biochemistry lecture with the development of biochemical laboratory skills.

Prerequisite: Permission of instructor; CHEM 2260 and 2274; and either CHEM 3350 or BIOL 3020 (chemistry course must have a grade of C or better). CHEM 8656 must be taken concurrently. (Fall). Crosslisted as: BIOL 4654 and CHEM 4654 and BIOL 8654.

## CHEM 8656 - Biochemistry I (3)

A study of the structure and function of biomolecules and biochemical reactions with an emphasis on enzymes and carbohydrate metabolism.
Prerequisite: Permission of instructor; CHEM 2260 and 2274; and either CHEM 3350 or BIOL 3020 (chemistry courses must have a grade of C or better). CHEM 8654 must be taken concurrently. (Fall). Crosslisted as: BIOL 4650 and CHEM 4650 and BIOL 8656.

## CHEM 8664 - Biochemistry II Laboratory (1)

A laboratory course to help integrate the concepts learned in biochemistry lecture with the development of biochemical laboratory skills, and to gain practical experience in experimental design.

Prerequisite: Permission of instructor; CHEM 4650 and 4654 with a grade of C or better or BIOL 4650 and 4654. Crosslisted as: BIOL 4664 and CHEM 4664 and BIOL 8664.

## CHEM 8666 - Biochemistry II (3)

A continuation of the study of the structure and function of biomolecules and biochemical reactions with an emphasis on metabolism of carbohydrates, lipids, amino acids and nucleotides, and the chemistry of signal transduction and genetic information transfer.

Prerequisite: Permission of instructor; CHEM 4650 and 4654 with a grade of C or better or BIOL 4650 and 4654. CHEM 8664 must be taken concurrently. Crosslisted as: BIOL 4660 and CHEM 4660 and BIOL 8666.

## CHEM 8676 - Protein Purification and Characterization (2)

This course is a study of protein biochemistry, protein purification techniques, and characterization strategies with an emphasis on chromatography and crystallography. The course has a significant laboratory component.
Prerequisite: CHEM 4650 and 4654 (grade of C or better), or CHEM 8656 and 8654 (grade of B or better), or permission of instructor. Crosslisted as: CHEM 4670.

CHEM 8936 - Special Topics in Chemistry (1-3)
Selected special topics in chemistry.
Prerequisite: CHEM 2260, 2400 with a grade of C or better. Some topics will require more advanced prerequisites and will be accepted for advanced course work in chemistry. Crosslisted as: CHEM 4930.
CHEM 8966 - Chemistry Problems (1-3)
Independent student research and communication of results.

Prerequisite: Permission of instructor. Crosslisted as: CHEM 4960.

## CHEM 8990 - Research in Chemistry (0)

Experimental or theoretical work in chemistry or an interdisciplinary field involving chemical content, analysis and communication of results.

Prerequisite: Permission of instructor, graduate, and sufficient grounding in the research area to fully support successful project accomplishment.

## CHME - Chemical Engineering

CHME 8426 - Chemical Reactor Engineering and Design (3)
Basic principles of chemical kinetics are coupled with models descriptive of rates of energy and mass transfer for the analysis and design of reactor systems

Prerequisite: CHME 3230 or permission. Crosslisted as: CHME 4420.

## CHME 8896 - Air Pollution, Assessment and Control

 (3)Survey of the present status of the air pollution problem and the application of engineering and scientific principles to its practical and effective coordinated control.

Prerequisite: Senior Standing. Crosslisted as: CHME 4890.

## CIST College of Information Science Technology

## CIST 9040 - Colloquium on IT Research (1)

The purpose of the course is to provide a forum for interaction among doctoral students and faculty on topics of relevance to professional success as researchers. Topics to be discussed include: nature of research in information technology; research problem selection, development, and presentation with special emphasis on the doctoral dissertation; dissertation process; development and crafting of papers for journals; collaboration on research projects; and review process for journal papers.

Prerequisite: Admission to PhD program in Information Technology or permission of instructor.

## CIST 9050-Colloquium on IT Teaching (1)

The purpose of this course is to provide a forum for interaction among doctoral students and faculty on topics of relevance to professional success as teachers/educators in university settings.
Prerequisite: Admission to PhD program in Information Technology or permission of instructor.

## CIST 9060 - Colloquium on IT Profession and Ethics

 (1)The purpose of this course is to provide a forum for interaction among doctoral students and faculty on topics of relevance to professional success as members of the academy.

Prerequisite: Admission to PhD program in Information Technology or permission of instructor.

CIST 9080 - Research Directions in IT (3)
The purpose of this course is to provide a forum for interaction among doctoral students and faculty on topics
of relevance to IT research and make them familiar with current and future research directions in IT.

Prerequisite: Doctoral standing in Information Technology or permission of course coordinators. CIST 9040 is recommended.

CIST 9900 - Special Topics in Information Technology (1-3)

This course is designed to acquaint students with issues which are current to the field or emerging trends in the information technology area. Topics will vary across terms. This course may be repeated, but no topic may be taken more than once.

Prerequisite: 1. Permission of the instructor 2. Additional prerequisite courses may be required for particular topic offerings.

## CIST 9980 - Independent Study in Information Technology (1-3)

This course allows students to research a topic of their interest that is not available in a formal course. The topic to be studied must be agreed upon by the student and the instructor.

Prerequisite: Permission of the instructor.
CIST 9990 - Dissertation (1-12)
The dissertation is an original research project conducted and written under the direction of a faculty dissertation committee 'supervisory committee'. The dissertation provides the student with an apportunity to do original research that contributes to advancing the body of knowledge in information systems and/or information technology.
Prerequisite: Admission to the Ph.D. program in Information Technology. Admission to candidacy for the Ph.D. degree. Prior to enrolling for dissertation hours, the students must have permission of the supervisory committee.

## CIVE - Civil Engineering

## CIVE 8610 - Urban Transportation

## CNST - Construction Management

## CNST 8156 - Mechanical/Electrical Project

 Management (3)Fundamentals of project management within the mechanical and electrical contracting industry. Codes, contract documents, productivity, coordination, project control and administration, scheduling, safety, and project closeout, from a specialty contracting perspective.

Crosslisted as: CNST 4150.

## CNST 8260 - Occupational Health and Safety for Construction (3)

Investigation of occupational health and safety hazards in the construction environment. Accident causation and illness exposure models, construction and safety programs and contract requirements, project safety and health management, special problems in construction safety, OSHA/EPD/ADA regulation and compliance issues, health assessment and monitoring, safe building methods design, toxic substance exposures, abatement methods, and worker training and protection.

Prerequisite: Permission; open only to students in engineering, construction management, architecture, or other closely related fields.

CNST 8346 - Professional Trends in Design/Build (3)
The organizational, managerial, ethical, and legal principles in the delivery of design/build as a construction project delivery system.
Prerequisite: Permission; master in engineering in construction or a related discipline. Crosslisted as: CNST 4340.

## CNST 8350 - Design/Build: Methods and Application (3)

Investigation, documentation, and application of current Design/Build processes and methodology used in commercial construction. Principles and practices of Design/Build as a project delivery system.

Prerequisite: Permission; open only to students in engineering, construction management, architecture, or other closely related field.

## CNST 8416 - Industrialized Building Systems (3)

Historical background of industrialized systems building; its economic and social relevance in modern society; and its influence on the traditional role of the contractor within the construction industry. Changes industrialized systems building will impose on the contractor's approach to finance, management, and construction methods and equipment.
Prerequisite: Graduate standing. Crosslisted as: CNST 4410.

## CNST 8500 - Sustainable Construction (3)

Application of Leadership in Energy and Environmental Design (LEED) best practices in building procurement and delivery systems. History, theory, and state-of-the-art practices in designing and constructing green buildings. Basic principles required to make the multitude of decisions when designing or constructing a green building. LEED construction practices (emerging practices that are economical, produce esthetically pleasing structures, and are environmentally sound).

Prerequisite: Graduate standing in ARCH, CIVE or CNST.

## CNST 8790 - Construction Management and Construction Systems (3)

Quantity survey methods, production rate and cost analysis, bidding, contingency and risk analysis. Computer applications of estimating and research topics. Monte Carlo simulation, Virtual \#D, BIM applications relevant to construction estimating and risk analysis.
Prerequisite: Permission.
CNST 8806 - Productivity and Human Factors in Construction (3)

Motivation and productivity improvement methods in the management of construction workers in their typical job environments. Methods to improve working environment in the field and in the office. Procedures and mechanisms to implement human behavior concepts for enhanced productivity and safety.
Prerequisite: Senior standing; CNST 2420; MGMT 3490 with grade of " C " or higher. Crosslisted as: CNST 4800.

## CNST 8826 - Heavy and/or Civil Construction (3)

Application of management principles to the construction of heavy and/or civil projects. History, theory, and methods of planning and constructing heavy and/or civil projects. Emerging equipment and new equipment capabilities. Economical use of equipment and managing costs associated with production.
Prerequisite: Senior or Graduate standing in ARCH, AE, CIVE, CNST, or CONE. Crosslisted as: CONE 4820 and CNST 4820 and CONE 8826.

## CNST 8830 - Management of Limited Scope Permitting (3)

Building code permitting process associated with all projects. Phased projects that require one or more limited scope permits prior to receiving the final full construction permit. How to improve coordination and reduce the confusion and risk associated with managing the permitting process. The permitting process that is applicable to both large and small projects and that can be easily adapted and used in all jurisdictions throughout the United States.

Prerequisite: Graduate standing in ARCH, CIVE or CNST.
CNST 8870 - Construction Leasdership and Strategic Planning (3)
New models of construction leadership for the 21st Century. Application of transformational leadership to strategic planning and marketing in construction contracting. Leadership and strategic problem solving constructs and methods.

Prerequisite: Permission; open only to students in engineering, construction management, architecture, or other closely related fields.

## CNST 8900 - Masters Project I (3)

First course in a two-course sequence required for the masters degree. Technical report, technical paper, or portfolio project, culminating in a final document or oral presentation.
Prerequisite: Admission to the master of engineering degree program with an emphasis in construction; and permission.

## CNST 8910 - Masters Project II (3)

Second course in a two-course sequence required for the masters degree. Technical report, technical paper, or portfolio project, culminating in a final document or oral presentation.

Prerequisite: CNST 8900 and permission.
CNST 8990 - Masters Thesis (1-10)
Prerequisite: Admission to Masters of Science in Construction degree program and permission of major advisor.

## CNST 9990 - Doctoral Dissertation (1-24)

None provided
Prerequisite: Admission to doctoral degree program and permission of supervisory committee chair.

## COMM - Communication

## COMM 8010 - Seminar in Communication Research:

 Quantitative Emphasis (3)1.1 Philosophy of scientific investigation from a quantitative standpoint, including process and products, in comparison to other ways of knowing. Introduces students to quantitative designs and statistical application for communication research and to data gathering methods appropriate for such designs. Emphasis is placed on preparing, evaluating and writing quantitatively oriented communication research proposals and reports.
Prerequisite: Graduate majoring in communication or permission of instructor.

## COMM 8020 - Seminar in Communication Research: Qualitative Emphasis (3)

This course is an introduction to the methodology and practice of qualitative research. Within the course, students will be exposed to research paradigms, approaches to qualitative research, and ways to collect and analyze qualitative data. Students will be required to design and carry out their own qualitative research project.

Prerequisite: Graduate student majoring in communication or permission of instructor.

## COMM 8030 - Topics in Communication Methods (1-

 3)This variable-content course provides students with indepth knowledge about such topics as communication research methods (e.g., survey or experimental, content analysis, legal)or other communication methods and assessment in contexts such as instructional, health, media, interpersonal, or organizational.

Prerequisite: Graduate standing or permission of instructor.

## COMM 8110 - Seminar in Modern Public Address (3)

Studies in figures, movements and institutions prominent in modern public address.

Prerequisite: Graduate and majoring in communication or permission of instructor.

## COMM 8180 - Topics in Speech Communication (3)

A variable content course dealing with speech communication. Each offering will treat a single aspect of speech communication in-depth - e.g., interpersonal conflict, gender and communication, organizational culture, health systems communication, relational communication, political communication, marital and family communication, communication education, etc. Course may be repeated.
Prerequisite: Graduate and permission of instructor.
COMM 8200 - Seminar in Popular Culture, Mass Media and Visual Rhetoric (3)

This course studies how discursive meaning is made through established and emerging visual technologies and the impact visual symbol systems are having upon the field of rhetoric in general. Students will investigate how visual technologies, discourse theory, and semiotic theory has intersected with and expanded contemporary rhetorical theories, and they will apply these theories to visual texts.

Prerequisite: Graduate standing. Crosslisted as: ENGL 8760.

## COMM 8300 - Topical Seminar in Mass Media (3)

Substantive study of specialized areas and modes of broadcasting, film and print communication. Content will vary. Course may be repeated.

Prerequisite: Graduate and majoring in communication or permission of instructor.

COMM 8470 - Foundations Seminar: Communication Studies (3)

This course is part of the Communication graduate degree core coursework. The course exposes students to the structure and historical development of the

Communication Studies discipline. It also addresses issues involved in conceptualizing, evaluating, and doing research in Communication Studies from post-positive, interpretive, and critical perspectives. Additionally, the course examines Communication Studies in selected contexts and sub-disciplines. Finally, current and future directions in the development of the Communication Studies discipline are addressed.

Prerequisite: Communication graduate students admitted to program; others may enroll only with instructor permission.

## COMM 8500 - Seminar in Communication Theory (3)

This course has a twofold purpose: (1) to expose students to different perspectives on building and critiquing theory ( e.g., the classical versus the interpretive naturalistic perspectives.) (2) to apply perspectives to the analysis and critique of a range of influential theoretical approaches employed in the communication discipline (e.g., systems theory, semiotics, message reception/processing theories).

Prerequisite: Graduate and majoring in communication, or permission of instructor.

## COMM 8570 - Foundations of Mass Communication

 (3)This course is part of the Communication graduate degree core coursework. This course presents a broad-based historical, theoretical, and methodological introduction to Mass Communication research and interconnection with Communication Studies. Course content moves from the initial, early 20th century research through contemporary studies and critique.

Prerequisite: Communication graduate students admitted to program; others may enroll only with instructor permission.

## COMM 8926 - Media Literacy (3)

An advanced seminar on the study of media and information literacy through deconstruction of mass communication content, meaning construction, framing analyses and critical/cultural approaches.
Prerequisite: For undergraduates, junior standing and minimum GPA of 2.25; Graduate students must be enrolled in the School of Communication program or receive permission of instructor.

## COMM 8970 - Graduate Project (3)

Project Option students must complete a three-hour graduate project written under the supervision of an adviser. A two-member graduate committee must approve the project.

Prerequisite: COMM 8010, 8020, 8470, 8570 and student mut be admitted to candidacy.

## COMM 8980 - Independent Study (1-3)

Students conduct independent research under the supervision of an adviser. May be taken multiple times with approval of graduate adviser.
COMM 8990-Thesis (1-6)
Independent research project written under the supervision of an adviser.

## COMM 8176 - Organizational Communication

COMM 9400 - Seminar in Communication \& Technology (3)

A synthesis of speech and mass communication research as it relates to the study of computers and technology. Computer Mediated Communication (CMC) will be emphasized. Students write a research paper appropriate for submission to an academic conference.

Prerequisite: COMM 8470 or 8570 , and COMM 8010 or 8020, or permission of instructor. Crosslisted as: ISQA 9900.

CONE - Construction Engineering

## CONE 8666 - Heavy and/or Civil Estimating (3)

Estimating techniques and strategies for heavy and/or civil construction. Unit pricing, heavy and civil construction takeoffs and estimating, equipment analysis, overhead cost and allocations, estimating software and government contracts.

Prerequisite: CONE 2410, 3780, and 4850. Crosslisted as: CONE 4660.

## CONE 8816 - Highway and Bridge Construction (3)

The methods and equipment required in the construction of roads and bridges. Methods and equipment necessary for roads and bridges. Substructure and superstructures, precast and cast-in-place segments, and standard and specialized equipment.

Prerequisite: CONE/CNST 2410. Crosslisted as: CONE 4810.

## CONE 8826 - Heavy and/or Civil Construction (3)

Application of management principles to the construction of heavy and/or civil projects. History, theory, and methods of planning and constructing heavy and/or civil projects. Emerging equipment and new equipment capabilities. Economical use of equipment and managing costs associated with production.

Prerequisite: Senior or Graduate standing in ARCH, AE, CIVE, CNST or CONE. Crosslisted as: CONE 4820 and CNST 4820 and CNST 8826.

## CONE 8836 - Support of Excavation (3)

The design and placement of excavation supports according to OSHA requirements and industry standards. A variety of routine to moderately complex support systems. Open excavations, heet piling and cofferdams. Soil mechanics, lateral loads, hydrology, and pumping methods.

Crosslisted as: CONE 4830.
CONE 850 - Sustainable Construction (3)
CONE 9990 - Doctoral Dissertation (1-24)
None provided
Prerequisite: Admission to doctoral degree program and permission of supervisory committee chair.

## COUN - Counseling

## COUN 4510 - Treatment Issues in Chemical Dependency (3)

This course addresses chemical dependency treatment issues including denial, minimization, relapse and its prevention, resistance, family dynamics, poly-substance abuse, co-occurring disorders, spirituality and the influence of self-help groups. The education will include the clinical treatment needs of individuals suffering from chemical dependency, taking into consideration diversity, gender, culture and lifestyle.
Prerequisite: Admission to counseling program or social work programs or permission of instructor. For social work students, SOWK/COUN 4680/8686 (Medical and Psychosocial Aspects of Alcohol/Drug Use and Addiction and SOWK/COUN 4690/8696 (Assessment and Case Management in Substance Abuse) must be taken prior to COUN/SOWK 4510/8516. Crosslisted as: COUN 8516 and SOWK 4510 and SOWK 8516.

## COUN 4680 - Medical and Psychosocial Aspects of Alcohol/Drug Use and Addiction (3)

This course introduces students to substance abuse disorders and their impact on the individual, family, and society. It covers psychopharmacology, alcohol and drug interactions, drug classifications, theories of chemical dependency, various models of treatment, vulnerable populations, and ethical and legal issues.
Prerequisite: Undergraduate: Admission to the BSSW program or permission of the School. Graduate:
Admission to the MSW program or permission of the School. Open to those admitted to the Counseling program or by permission. Crosslisted as: COUN 8686 and SOWK 8686 and SOWK 4680.

COUN 4690 - Assessment and Case Management in Substance Abuse (3)

This course focuses on assessment of clients and their environment, and diagnosis and referral for substance abuse treatment. Emphasis is given to assessment instruments, treatment levels, treatment planning, case management, and social justice.

Prerequisite: For Social Work students: Undergraduate: Admission to the BSSW program or permission of the School and SOWK/COUN 4680 (or equivalent course) prior to or concurrent. Graduate: Admission to MSW program or permission of the School and SOWK/COUN 8686 (or equivalent course) prior to or concurrent. For Counseling students: Admission to the program or by permission. Crosslisted as: COUN 8696 and SOWK 8696 and SOWK 4690.

## COUN 8006 - Special Studies in Counseling (1-6)

This course is designed to allow candidates to explore a special counseling related topic under the direction of a faculty member. Topics studied and the nature of the learning activities are mutually agreed upon by the candidate and instructor. This course will prepare graduate (or undergraduate) candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Permission by the Department. Graduate Level: Must be admitted to the Counseling Program. Undergraduate Level: Must be seeking a Bachelor of General Studies with a Concentration in Behavioral Health. Crosslisted as: COUN 4000.

## COUN 8020 - Introduction to Counseling (1)

Introduction to Counseling is an introductory course for students majoring in counseling. Selected issues underlying the counseling profession are studied.
Prerequisite: Admission to the Graduate College and/or the Counseling Department.

## COUN 8030 - Counseling Practices (3)

This is a pre-practicum course for counseling majors. The course is designed to develop basic counseling skills.

Prerequisite: Admission to the Graduate College and the Counseling Department.

## COUN 8040 - Professional and Ethical Issues for Professional Counselors (3)

This course examines the ethical and professional aspects of individual, couple and family counseling including liabilities incurred by the professional counselor who improperly provides services or fails to provide services.

Prerequisite: Graduate standing and admission into the Counseling program or related academic graduate programs.

## COUN 8050 - Introduction to Professional School Counseling (1)

This is an exploratory course for candidates considering entering the field of professional school counseling. This introductory course is required for candidates majoring in counseling, with a concentration in school counseling. Selected issues underlying the school counseling profession are studied.

Prerequisite: Admission to the Graduate College and/or the Counseling Department.

## COUN 8100 - Research Project in Counseling and Guidance (1-3)

Individual or group study and analysis of specific problems/issues in the field.

Prerequisite: Admission to Counseling program and permission of instructor. Not open to non-degree students.

## COUN 8110 - Human Development and Psycho-Social Intervention Strategies (3)

This course is designed to examine theories of human development covering the lifespan of the individual and the psychosocial interventions appropriate to various phases of the lifespan. The course will emphasize human development as an interactive process involving individuals in a number of contexts; hence human diversity factors (racial ethnic groups, gender, sexual orientation) also will be considered.

Prerequisite: Graduate status.

## COUN 8150 - The Student and Student Personnel Work in Higher Education (3)

An overview of the characteristics of college students and their interaction with campus environmental influences. The impact of student personnel work is considered as it affects personality growth, social development and career planning by college students.
Prerequisite: Admission to Counseling program.
COUN 8160 - Alcohol \& Other Drug Prevention/Edu in Schools \& Communities (3)

This course will focus on a team approach to address alcohol and other drug education, prevention, referral techniques and counseling strategies through the cooperation of school staff and community representatives who work with children from pre-school through 12th grade. Topics will include etiology of alcohol and other drug problems, current factual information concerning alcohol and other drugs, strategies for instruction, gaining parental and community support, developing youth leadership for prevention, intervention techniques for school youth, multicultural factors in prevention education, alternatives to drug use, referral and support resources, and
the development of mini-networks for dissemination of information within the school and community.

Prerequisite: Graduate. Crosslisted as: HED 8160.
COUN 8190 - Research Project in Counseling and Guidance ( 2 or 3 )

Research study on a problem in the area of guidance and counseling.

Prerequisite: Admission to Counseling program and permission of instructor.

## COUN 8200 - Counseling Theories (3)

This course is designed to examine counseling theories and the historical and geographic influence on counseling theory development.

Prerequisite: Admission to counseling program or permission of department.

## COUN 8210-Organization \& Administration of School

 Counseling Programs (3)The course introduces graduate candidates to an administrative systems approach to organizing comprehensive and developmental school counseling programs for all k-12 students.
Prerequisite: None.

## COUN 8220 - Counseling Practicum (3)

This course is the first of the clinical applications of counseling knowledge, techniques, and specialty areas in community settings. Candidates practice, develop and improve counseling skills in an environment of professional constructive criticism.

Prerequisite: COUN 8040, 8920, 8610, a grade of B or higher in COUN 8030. Students must also complete the block of techniques courses (COUN 8306, COUN 8316, COUN 8406) or COUN 8280 Crisis Intervention Techniques.

## COUN 8226 - Career Development and Lifestyle (3)

This course is designed to acquaint graduate candidates in counseling with both practical and professional skills denoting how persons make vocational choices.
Prerequisite: Graduate standing.
COUN 8230 - Appraisal Techniques in Counseling and Guidance (3)

Appraisal Techniques in Counseling and Guidance discusses the history of individual appraisal, the major technical considerations governing assessments and a survey of measurement devices in the cognitive and affective domains. The course will include uses and implication of non-standardized assessment devices. Additionally, this course will cover the responsible use and
interpretation of ability, aptitude, interest, personality, and career development measures.

Prerequisite: Admission to Counseling program and TED 8010.

## COUN 8250 - Internship I - Community Counseling (3)

This course concerns itself with the clinical applications of counseling knowledge, techniques, and specialty areas in a community agency setting. It is the continuation of COUN 8220.

Prerequisite: Admission to Counseling program and COUN 8220 with a grade of $B$ or higher.

## COUN 8260 - Internship II - Community Counseling (3)

Field experience in an approved agency program under the supervision of a licensed counselor and university instructor.

Prerequisite: Admission to Counseling program and COUN 8250 with a grade of $B$ or higher. Not open to nondegree students.

## COUN 8270 - Group Techniques in Guidance (1)

The course covers the group process, using primarily a didactic approach.

Prerequisite: Admission to graduate program in
Counseling or permission of instructor.

## COUN 8280 - Crisis Intervention Strategies \&

## Techniques (3)

This course will present approaches to crisis intervention which include definitions and characteristics of a crisis, a brief history of crisis intervention and associated theories/models and a practice of skills for intervention and crisis case management. Topics will include applied therapeutic counseling strategies in general casework and in crisis intervention cases, in particular, which describe actual techniques to alleviate the crisis.
Prerequisite: admitted to program.

## COUN 8306 - Counseling Techniques I (1)

Study of counseling process, knowledge of beginning skills development and application of techniques related to a specific approach. Topics may include Adlerian counseling (specified in this syllabus), anger management, play therapy, solution focused, cognition, etc.
Prerequisite: Admission to Counseling program. Not open to non-degree students. Crosslisted as: COUN 4300.

## COUN 8316 - Counseling Techniques II (1)

Study of counseling process, knowledge of beginning skills development and application of techniques related to a specific approach. Topics may include Rational Emotive

Behavior Therapy - REBT (specified in this syllabi), Dialetical Behavior Therapy, anger management, play therapy, solution focused, cognitive theory, or others.
Prerequisite: Graduate Level: Admission to Counseling program. Not open to non-degree students. Undergraduate Level: Admission to students seeking a bachelor degree in general studies with a concentration in behavioral health. Crosslisted as: COUN 4310.
COUN 8330 - Practicum for School Counselors (3)
This course is the first of the clinical applications to provide the prospective school counselor with supervision in a school counseling setting. Candidates will continue to develop counseling skills and will become immersed in the work of a professional school counselor. Candidates practice, develop and improve counseling skills in an environment of professional and constructive criticism.
Prerequisite: Minimum of 26 hours completed in the program including COUN 8040 and COUN 8030 with a grade of B or higher. Students must also complete the block of techniques courses (COUN 8306, COUN 8316, COUN 8406) or COUN 8280 Crisis Intervention Techniques. Permission of the instructor is also required.

## COUN 8350 - Advanced Elementary Counseling Practicum (1-6)

Advanced clinical experience in counseling in the elementary school setting under the supervision of a school site supervisor and a counseling professor from the Counseling Department.

Prerequisite: Admission to the counseling program, COUN 8330, and permission of instructor. Not open to nondegree students.

## COUN 8370 - Group Counseling: Theory and Practice (2)

A course designed primarily for counselors with a combination of theory and experiences necessary to the understanding of effective leadership skills involved in the group counseling process.

Prerequisite: Admission to Counseling program, COUN 8030 and COUN 8200.

## COUN 8406 - Counseling Techniques III (1)

This course is intended to assist candidates in developing more systematic integration of previously learned information and skills and the application to specific counseling situations. Topics may include Solution Focused Counseling - SFC (specified in this syllabi), Dialetical Behavior Therapy, anger management, play therapy, solution focused, cognitive theory, or others.
Prerequisite: Graduate Level: Admission to Counseling program. Not open to non-degree students. Undergraduate Level: Admission to students seeking a bachelor degree in
general studies with a concentration in behavioral health. Crosslisted as: COUN 4400.

## COUN 8430 - Internship in School Counseling (3)

This course is designed to provide the prospective school counselor with supervision in a school guidance program. Candidates will continue to develop counseling skills and will become immersed in the work of a professional school counselor. During the internship sequence (COUN 8430 and COUN 8460) candidates are required to have 600 hours of experience where the student performs, under supervision, a variety of activities that a regularly employed school counselor would be expected to perform. Of the 600 hours ( $40 \%$ ) or 240 hours of direct contact must be documented and include, but not limited to; individual counseling, group work, classroom group guidance, and consultation.

Prerequisite: COUN 8330.

## COUN 8450 - College Student Personnel Internship (16)

This course is designed to provide practical work experience under supervision in various areas within student personnel services.

Prerequisite: Admission to counseling program and permission of instructor. Not open to non-degree students.

## COUN 8460 - Advanced Internship in School Counseling (3-6)

Candidates will be required to complete a minimum of 300 hours of supervised advanced internship toward the total of 600 hours of supervised internship in the sequence (COUN 8430, COUN 8460). This is a continuation of COUN 8430. It is a field experience in an approved school counseling program under the supervision of a qualified school counselor and a counselor educator.

Prerequisite: Admission to Counseling program and a grade of " B " or higher in COUN 8430.

## COUN 8500 - Counseling and Consulting for Special Concerns (2)

This course presents a wide range of experiences to candidates intending to work as counselors and consultants in community settings. Consultation and collaboration are characterized as problem-solving processes that involve a variety of key decision points.
Prerequisite: Admission to the Program.

## COUN 8516 - Treatment Issues in Chemical Dependency (3)

This course addresses chemical dependency treatment issues including denial, minimization, relapse and its prevention, resistance, family dynamics, poly-substance abuse, co-occurring disorders, spirituality and the influence of self-help groups. The education will include the clinical
treatment needs of individuals suffering from chemical dependency, taking into consideration diversity, gender, culture and lifestyle.

Prerequisite: Admission to counseling program or social work programs or permission of instructor. For social work students, SOWK/COUN 4680/8686 (Medical and Psychosocial Aspects of Alcohol/Drug Use and Addiction and SOWK/COUN 4690/8696 (Assessment and Case Management in Substance Abuse) must be taken prior to COUN/SOWK 4510/8516. Crosslisted as: SOWK 4510 and COUN 4510 and SOWK 8516.

## COUN 8520 - Counseling Multicultural and Diverse Populations (3)

This course is designed to examine and study issues pertaining to counseling persons from multicultural and diverse backgrounds.

Prerequisite: COUN 8030 Counseling Practices.
COUN 8600 - Parent-Staff Development and Consultation (3)

The study of information, research, consultation and programs for the development of effective parenting skills and effective school staff interaction skills.

Prerequisite: This course is intended for Graduate candidates in counseling or other areas of education. Not open to non-degree students.

## COUN 8610 - Introduction to Marital and Family Therapy (3)

This course is designed to acquaint candidates in the Human Services field with basic marriage and family counseling theory and techniques.
Prerequisite: Admission to Counseling program.
COUN 8620 - Survey of Issues in School Counseling (2)
This course is designed to provide school counselors with information on topics that are current and relevant. It will allow candidates and practicing counselors the opportunity to study and evaluate what activities school counselors are currently engaged in and consideration of strategies to deal with clients and families.

Prerequisite: Admission to counseling program. Not open to non-degree students.

## COUN 8650 - Issues in Elementary and Middle School Counseling (3)

This course provides an overview of the unique issues, approaches, systems and practice of elementary and middle school counseling. Candidates will explore roles and responsibilities of elementary and middle school counselors including individual counseling skills, curriculum development, program delivery, parent and staff development, consultation, and collaboration. This
course will address the uniqueness of each level with a focus on developmentally appropriate approaches to counseling and education.

Prerequisite: COUN 8050.

## COUN 8686 - Medical and Psychosocial Aspects of Alcohol/Drug Use and Addiction (3)

This course introduces students to substance abuse disorders and their impact on the individual, family, and society. It covers psychopharmacology, alcohol and drug interactions, drug classifications, theories of chemical dependency, various models of treatment, vulnerable populations, and ethical and legal issues.

Prerequisite: Undergraduate: Admission to the BSSW program or permission of the School. Graduate: Admission to the MSW program or permission of the School. Open to those admitted to the Counseling program or by permission. Crosslisted as: SOWK 8686 and SOWK 4680 and COUN 4680.

COUN 8696 - Assessment and Case Management in Substance Abuse (3)

This course focuses on assessment of clients and their environment, and diagnosis and referral for substance abuse treatment. Emphasis is given to assessment instruments, treatment levels, treatment planning, case management, and social justice.
Prerequisite: For Social Work students: Undergraduate: Admission to the BSSW program or permission of the School and SOWK/COUN 4680 (or equivalent course) prior to or concurrent. Graduate: Admission to MSW program or permission of the School and SOWK/COUN 8686 (or equivalent course) prior to or concurrent. For Counseling students: Admission to the program or by permission. Crosslisted as: SOWK 8696 and SOWK 4690 and COUN 4690.

## COUN 8720 - Individual Counseling with Children and Consultation (3)

The study of individual counseling with children and consultation with parents and professionals.
Prerequisite: Admission to counseling program, COUN $8030,8040,8200,8306,8316$, and 8406 ; or permission.

## COUN 8730 - Organization \& Admin. of Elementary Counseling Programs (3)

The study of organization and administration of elementary guidance and counseling programs.

Prerequisite: Open to graduate level candidates; not open to non-degree students.

COUN 8750 - School Counseling Groups \& Enrichment Programs (2)

The study of small group counseling and enrichment programs in schools. This course is intended for Graduate students in the school counseling program.
Prerequisite: Admission to graduate Study in Counseling. Counseling 8030/8270/8406 or permission.

## COUN 8756 - Mid-life, Career Change, Preretirement

 Planning (3)This course is designed to involve candidates in the exploration of the developmental tasks of mid-life, myths and realities related to career change as well as the implication of preretirement planning. Factual information, as well as model examination and evaluation are presented to aid the candidate in becoming better equipped to understand some of the forces which affect the well-being of middle aged persons as they prepare for the later years.

Prerequisite: Junior, permission of instructor. Crosslisted as: GERO 8756 and GERO 4750.

## COUN 8816 - Principles and Philosophy of Integrating Career and Academic Education (3)

This course presents the philosophies and principles practices underlying how schools can better prepare students for the workplaces of the future. The emphasis will be on the integration of career education within broader academic preparation. Roles and responsibilities of teachers, counselors, and administrators in implementing integrated approaches will be examined.

Crosslisted as: TED 8816 and TED 4810.
COUN 8920 - Treatment Planning and the DSM-IV (3)
This course will teach the stages of treatment planning and the use of the DSM-IV in the treatment process in mental health settings and offer opportunities to integrate counseling theories into practice. Factors such as psychopathology, psychopharacology, ethics, and human diversity will be considered.

Prerequisite: Admission to Counseling program, COUN 8200, and abnormal psychology.
COUN 8986 - Counseling Skills in Gerontology (3)
This course is intended to help develop basic counseling skills for application in gerontology.

Crosslisted as: GERO 4980 and GERO 8986.

## COUN 8990 - Thesis (1-6)

To develop the candidate's ability to carry out accepted procedures associated with the research process.

Prerequisite: Permission of instructor committee chairperson.

## COUN 8010 - Teaching Models in Affective Education (3)

## COUN 8120 - Counseling with Parents (3)

COUN 8796 - Practical and Experiential Training in Counseling (3)

COUN 9200 - Independent Study in Counseling Theories and Techniques (1-3)

Guided study of counseling theory and techniques under supervision of faculty member.

Prerequisite: Admission to Counseling program, TED 8010 and permission of instructor.

## CPH

CPH 500 - Foundations of Public Health (3)
CPH 501 - Health Behavior (3)
CPH 502 - Health Services Administration (3)
CPH 503 - Public Health, Environment, \& Society (3)
CPH 504 - Epidemiology in Public Health (3)
CPH 506 - Biostatistics I (3)
CPH 565 - Health Care Finance (3)
CPH 566 - Health Care Policy (3)

## CRCJ Criminology Criminal Justice

## CRCJ 8010 - Nature of Crime (3)

This course provides an overview of the major dimensions of crime in the U.S. Content areas included are the epidemiology of crime, the costs of crime and typologies of crime and criminals.

Prerequisite: Admission to UNO Graduate College.
CRCJ 8020 - Seminar in Administration of Justice (3)
This course is designed to provide students with a critical understanding of responses to crime. Particular emphasis is placed on theory and research bearing upon the effectiveness of the policies and strategies of the principal institutions of the criminal justice system - the police, courts and corrections. Additionally, philosophical and practical matters pertaining to "justice" and "fairness" in the administration of the criminal law are explored.

Prerequisite: Admission to UNO Graduate College.
CRCJ 8030 - Criminal Justice Research Theory and Methodology (3)

Research theory and methodology in the social sciences as applicable to criminal justice; preparation of research
designs, conceptual models; sampling procedures; and development of individual research papers.

Prerequisite: Admission to UNO Graduate College.
CRCJ 8040 - Seminar in Police and Society (3)
This course is designed to explore the role of the police in American society. Attention is given to the origins of policing, the nature of police organizations and police work, and patterns of relations between the police and the public. The values of a democratic society as they affect the law enforcement role are discussed.

Prerequisite: Admission to the graduate program in Criminology and Criminal Justice; or admission to the UNO graduate program and permission of instructor.

## CRCJ 8050 - Seminar in Corrections (3)

This course is designed to give an analytical perspective to the history, development, implementation and future of critical issues in the field of corrections. Primary focus will be directed toward an exploration of the various theoretical approaches to corrections and the research intended to support or refute these perspectives.

Prerequisite: Admission to graduate program in Criminology and Criminal Justice; or admission to UNO graduate program and permission of instructor.

CRCJ 8060 - Seminar in the Criminal Court System (3)
This course is designed to provide a social science perspective on the role of the courts in the criminal justice system. The ideals of the system will be compared with actual functioning, and court reform programs and proposals will be critically examined.
Prerequisite: Admission to Criminology and Criminal Justice graduate program; or admission to UNO graduate program and instructor permission.
CRCJ 8070 - Seminar in Criminal Law and Procedure (3)

This course is designed to examine substantive criminal law as the basis of social control in our country. Contemporary issues such as the insanity defense, decriminalization of so-called victimless crimes, sexual assault and abortion, and current proposals to assist victims of crimes will be among the topics explored. In addition, current criminal procedure problems relating to right to counsel, search and seizure and interrogation will be examined.

Prerequisite: Admission to graduate program in Criminology and Criminal Justice; or admission to UNO graduate program and permission of instructor.
CRCJ 8080 - Seminar in Juvenile Justice (3)
An inquiry in the social ramifications of the entire juvenile delinquency process including labeling, detention,
incarceration and tolerance. Pre- and post-adjudicatory issues are dealt with as well as a realistic perspective given to delinquency prevention strategies.

Prerequisite: Admission to UNO graduate program.

## CRCJ 8090 - Seminar in Theoretical Criminology (3)

A study of the etiology of crime as a social phenomenon and an objective analysis of the historical influences and thought which molded its development into an accepted contemporary science.

Prerequisite: Admission to graduate program in criminology and criminal justice; or admission to UNO graduate program and instructor permission.

## CRCJ 8100 - Criminal Justice Organization, Administration and Management (3)

This course will deal with issues in the organization and administration of modern justice agencies. The students will be exposed to theories, concepts, and issues relating to the administration and organization of justice agencies.
Prerequisite: Admission to the graduate program in Criminology and Criminal Justice; or admission to UNO graduate program and permission of instructor.

## CRCJ 8130 - Seminar in Women and Criminal Justice (3)

This course focuses on the experiences of women in the criminal justice system. It will cover the history of criminological theory on women, application of mainstream criminological theory to women, and women as offenders, victims, and professionals in the criminal justice system.

Prerequisite: Admission to Criminology and Criminal Justice graduate program; or admission to UNO graduate program and instructor permission.

## CRCJ 8136 - Sociology of Deviant Behavior (3)

This course is designed to investigate the etiology of many forms of norm-violating conduct. Emphasis will be placed on rule-breaking behavior as defined in the criminal statutes.

Prerequisite: For 4130: Upper-division CRCJ major or CRCJ minor and CRCJ 1010 and jr/sr standing; For 8136: Admission to Criminology and Criminal Justice graduate program; or admission to UNO graduate program and instructor permission. Crosslisted as: CRCJ 4130.

## CRCJ 8180 - Criminal Justice Internship (3)

This course is designed to provide supervised individualized learning experiences in a selected criminal justice agency. The principal objective of the internship is to provide students with the opportunity to apply theoretical and methodological principles acquired in
graduate courses to the analysis of problems in local criminal justice agencies.

Prerequisite: Admission to graduate program in Criminology and Criminal Justice, successful completion of 15 hours of graduate work, and permission of instructor.

## CRCJ 8190 - Independent Study (1-3)

Individual projects in research, literature review or creative production which may or may not be an extension of course work. The work will be supervised and evaluated by departmental graduate faculty members.

Prerequisite: Admission to graduate program at UNO, and permission of instructor required.

## CRCJ 8210 - Program Evaluation and Policy Analysis (3)

This course is a survey of program evaluation and policy analysis techniques. The focus is on theoretical foundations of the Criminal Justice policy process, program development and implementation, research designs specific to program evaluation and policy research, and methodological techniques commonly used to evaluate criminal justice programs and policies
Prerequisite: Admission to doctoral program in Criminology and Criminal Justice; or admission to graduate program at UNO and CRCJ8030; or instructor permission.

## CRCJ 8230 - Terrorism (3)

A course devoted to an exploration and analysis of contemporary special problems in the broad spectrum of law enforcement and corrections.

Prerequisite: Admission to Criminology and Criminal Justice graduate program; or UNO graduate student and permission of instructor.

## CRCJ 8356 - Community-based Corrections (3)

This course is intended for advanced students with a special interest in the correctional process as applied in a community setting. It is designed to focus on innovative community-based strategies for dealing with the offender as well as the traditional processes of probation and parole.
Prerequisite: Admission to Criminology and Criminal Justice graduate program; or admission to UNO graduate program and instructor permission. Crosslisted as: CRCJ 4350.

## CRCJ 8516 - Violence (3)

This course is a survey of the nature and extent of violence. The focus is on patterns of violence across social groups, the causes and correlates of violence and violent behavior, and programs/policies geared toward violence prevention and reduction. Also of interest is the relationship between theory and violence research

Prerequisite: Upper-division CRCJ major; CRCJ minor; or CRCJ1010 and jr/sr standing. Crosslisted as: CRCJ 4510.

## CRCJ 8800 - Special Problems in Criminal Justice (3)

A course devoted to an exploration and analysis of contemporary special problems in the broad spectrum of criminal justice philosophy. This course looks at philosophical issues related to social control. The purpose of this course is to foster a deeper understanding of the reasons, jutifications, and problems related to societal approaches to the control of its citizens.

Prerequisite: Admission to Criminology and Criminal Justice graduate program; or UNO graduate student and permission of instructor.

## CRCJ 8950 - Statistical Applications in Criminal Justice \& Public Admin (3)

This is a required course which provides a foundation for the use of statistical methods in criminal justice and public affairs research. It will review fundamentals of research, showing the interplay between the theory, the research, the statistical method, and the interpretation.

Prerequisite: Admission to UNO Graduate college.

## CRCJ 8970 - Capstone Project in Criminology and Criminal Justice (3)

The Capstone Project offers each student the opportunity to demonstrate mastery of the theory and practice of Criminology and Criminal Justice by applying the knowledge and skills gained in the Master of Science program to a project of the student's choice. This involves completing a project report reflecting the cumulative knowledge gained from these experiences. This class is intended only for students who are completing their Master of Science degree in Criminology and Criminal Justice.

Prerequisite: Admission to Criminology and Criminal Justice MS program, and completion of a minimum of 24 credit hours; or permission of Masters Program Coordinator.

## CRCJ 8990 - Masters Thesis (1-6)

The thesis is required for all students in the MA program. It provides students with an opportunity to integrate theories, concepts, and aspects of the criminology and criminal justice literature with methods and techniques for conducting research, through the completion of an original research project. The thesis project should constitute original research and is conducted under the supervision of a Masters Thesis Committee.

Prerequisite: Admission to the MA program in Criminology and Criminal Justice; and, CRCJ8010, CRCJ8020, CRCJ8030, CRCJ8950 and 6 other 8000+ CRCJ courses.

## CRCJ 8110 - Criminal Justice Planning and Change (3)

## CRCJ 8160 - Seminar in Community-Based Corrections (3)

CRCJ 8200 - Special Problems in Criminal Justice (3)
CRCJ 9010 - Seminar on Law and Social Control (3)
This is a required course which will examine the relationships between the state, the law, and the citizen in a democratic society. It will also examine the relationship between social control, law and social change.
Prerequisite: Admission to graduate program in Criminology and Criminal Justice; or UNO graduate student and permission of instructor.

## CRCJ 9020 - Seminar on Theories of Crime (3)

This is a required course which emphasizes conceptual and theoretical issues in contemporary criminological theory. It also provides students with a working knowledge of theory construction.

Prerequisite: Admission to Criminology and Criminal Justice MA or PhD graduate programs; or admission to UNO graduate program and instructor permission.

## CRCJ 9030 - Seminar on Minorities and the Criminal Justice System (3)

This is a required course which introduces students to current empirical research and theory on racial minorities and the criminal justice system. It focuses on racial minorities as victims of crime, as offenders, and as criminal justice professionals.

Prerequisite: Admission to UNO graduate program.

## CRCJ 9040 - Comparative Criminology and Criminal Justice Systems (3)

This course provides a cross-national examination of the dynamics of criminality and the social response to crime. It also describes the extent and nature of crime in different countries.

Prerequisite: Admission to graduate program in Criminology and Crimimal Justice; or admission to UNO graduate program and instructor permission.

## CRCJ 9050 - Academic Writing (3)

This course is designed to familiarize students with academic and professional writing with the goal of promoting the development of formal writing and organizational skills. Students will learn how to construct and organize scholarly papers to better prepare them for the comprehensive examination, the doctoral dissertation, the development of scholarly journal articles and monographs, and the development of funded project proposals.

Prerequisite: Admission to PhD program in Criminology and Criminal Justice; or UNO graduate student and permission of instructor.

## CRCJ 9080 - Advanced Statistical Applications (3)

This is a required course which will provide the student with fundamentals of modern statistical techniques used in criminal justice and public affairs research.

Prerequisite: Admission to PhD program in Criminology and Criminal Justice; or UNO graduate student and CRCJ8950 or PA8950 and instructor permission. Crosslisted as: PA 9080.

## CRCJ 9090 - Special Problems in Research Methods (3)

This course will explore specialized topics in research methodology. The course assumes that participants have a firm understanding of the basic principles of research methods and statistics.

Prerequisite: Admission to PhD program in Criminology and Criminal Justice; or UNO graduate student and instructor permission.

## CRCJ 9100 - Special Problems in Statistical Analysis (3)

This course will explore advanced techniques of statistical analysis within the field of criminal justice. It assumes that participants have taken courses in basic descriptive and inferential statistics and advanced multivariate analysis of variance and regression.

Prerequisite: Admission to the graduate program in Criminology and Criminal Justice and CRCJ9080; or admission to UNO graduate program, CRCJ9080, and permission of the instructor.
CRCJ 9130 - Advanced Research on Policing (3)
This course will explore critical research issues in American policing. The focus of the course may vary and cover topics such as police discretion, police use of force, labor unions in law enforcement, gender differences in policiing, and police organization management.

Prerequisite: Admission to Criminology and Criminal Justice graduate program; or admission to UNO graduate program and permission of the instructor.

## CRCJ 9150 - Special Topics in Criminology and Criminal Justice (3)

This course will focus on specialized topics in criminology and criminal justice research. The purpose of the course is to provide students with an opportunity to read and critique current research on topics such as the history of the criminal justice system, civilian review of the police, sentencing, or the application of the death penalty.

Prerequisite: Admission to graduate program in Criminology and Criminal Justice; or UNO graduate student and instructor permission.

## CRCJ 9160 - Seminar in Community-Based Corrections (3)

This course will deal with strategies of correctional reform and with models and practices of community-based corrections. Recent innovations in community-based corrections will be examined to demonstrate how they fit into an overall correctional strategy.

Prerequisite: Admission to UNO graduate program.

## CRCJ 9170 - Seminar on Institutional Corrections (3)

This course will examine the role of correctional institutions in the criminal justice system. The student will be exposed to the historical, current, and projected role of these institutions.

Prerequisite: Admission to Criminology and Criminal Justice graduate program; or admission to UNO graduate program and instructor permission.

## CRCJ 9180 - Seminar on the Criminal Court System

 (3)This course will focus on the structure, organization, and operation of the state and federal court systems in the United States. The purpose of the course is to survey recent research on the dynamics of courthouse justice--charging, plea bargaining, bail decision making, jury decision making, and sentencing.

Prerequisite: Admission to graduate program in Criminology and Criminal Justice; or admission to UNO graduate program and permission of instructor.

## CRCJ 9200 - Seminar on Violent Crime and Criminal Behavior (3)

This course exposes students to the leading theories and research in the area of violent criminal behavior. It addresses major violent crimes including rape, homicide, and child sexual physical abuse.

Prerequisite: Admission to Criminology and Criminal Justice graduate program; or admission to UNO graduate program and instructor permission.

## CRCJ 9220 - Advanced Criminological Theory and Theory Construction (3)

This course is designed to extend students' knowledge of theory and theory construction beyond the basics of the elements and propositions of particular criminological theories. Students will have an opportunity to examine in depth topics such as theory construction, theory integration, theory compatibility and synthesis, and new directions in criminological theory.

Prerequisite: CRCJ8090 or CRCJ9020 and admission to graduate program in Criminology and Criminal Justice; or permission of instructor.

## CRCJ 9700 - Teaching Criminal Justice at the College/University Level (3)

This seminar is a required course for doctoral students in criminal justice. The purpose of the course is to provide students with the knowledge and skills that will enable them to become informed, effective, and stimulating teachers. A variety of pedagogical issues will be covered during the course of the semester; theories of learning and student motivation; constructing a course syllabus; designing effective writing assignments and in-class exercises; leading class discussions; testing and grading; and managing the classroom.

Prerequisite: Admission to Criminology and Criminal Justice PhD graduate program; or admission to Criminology and Criminal Justice MA or MS graduate program and instructor permission.

## CRCJ 9800 - Advanced Research Design (3)

This is a required course which will expose students to advanced topics in research methods in preparation for writing their doctoral dissertation. It will also apply advanced methodological techniques to problems in the field.

Prerequisite: Admission to PhD program in Criminology and Criminal Justice; or UNO graduate student and instructor permission.

## CRCJ 9980 - Directed Readings in Criminology and Criminal Justice (1-6)

This course is designed to provide the advanced graduate student with the opportunity to do extended readings on a specialized criminology or criminal justice topic.

Prerequisite: Admission to graduate program in criminology and criminal justice or UNO graduate program, and permission of instructor required.

## CRCJ 9990 - Dissertation (1-20)

The dissertation is an original research project conducted and written under the direction of a faculty dissertation committee. The dissertation provides the student with an opportunity to do original research that contributes to advancing the body of knowledge on crime and criminal justice.

Prerequisite: Completion of all coursework, completion of the comprehensive examination, and permission of Supervisory Committee Chair.

CRCJ 9000 - Theory II and Theory Construction (3)
CRCJ 9110 - Seminar on Police Organization and Management (3)

CRCJ 9120 - Seminar on Police Effectiveness (3)

## CRP Community Regional Planning

## CRP 8006 - Introduction to Planning (3)

The field of community and regional planning is introduced and is studied in relation to the history of cities, urbanization, and regionalization. The course explores the origins and evolution of American urban and regional planning practice. The planning process as a response to social, political, physical, and economic factors is analyzed. The course introduces the community comprehensive planning process, plan implementation, and functional areas of planning.

Crosslisted as: CRP 4000.

## CRP 8020 - Planning Theory (3)

Linkages between knowledge and organized action in planning practice are analyzed in terms of philosophical underpinnings, decision theory, programming, policy formulation, politics, goals, values and social change. The historical traditions of contemporary planning theory are studied. The identities, roles, and relationships of planners with society are explored.
Prerequisite: CRP 4000/8006.

## CRP 8040 - Legal Aspects of Planning (3)

Applications of constitutional, common, administrative, and statutory law in the planning process are studied. The roles of the branches of American government in the regulation and control of land use and development, as well as in the planning, development, and delivery of public services and facilities are examined. Legal theories, issues, cases, and applications relevant to planning are included.

Prerequisite: CRP 4000/8006 or permission.

## CRP 8506 - Social Planning Policy (3)

The area of social planning and policy is introduced and studied through a historical presentation of U.S. social welfare policy, an exploration of models and methods utilized by government and human service agencies in the planning of social programs, and analysis of contemporary social policy issues. Areas to be covered include privatization, universalism vs. selectivity, race and ethnicity, homelessness, and poverty.

Crosslisted as: CRP 4500.

## CRP 8606 - Planning and Design in the Built Environment (3)

The course introduces principles and practices of planning, design, and implementation for multiple-structure built environments. The influences of physical, social, environmental, and economic factors upon planned and designed environments are studied. Various planning and design methods, processes, and products are introduced. Means of project implementation are explored, and examples of existing and proposed projects are studied.

Crosslisted as: CRP 4600.

## CRP 8706 - Environmental Planning and Policy (3)

The course introduces environmental planning, including its history and origins. Major environmental issues throughout the world, and the roles of planning in addressing these problems, are discussed. The environmental planning process and environmental legislation are studied.

Crosslisted as: CRP 4700.

## CRP 8806 - Economic Development and Regional Planning (3)

This course introduces the theory and principles of economic development planning and regional planning involving multiple jurisdictions. Concepts, analytical approaches, and theories of economic growth of local communities and multijurisdictional regions are introduced. The course includes consideration of local economic development plans for small communities, as well regional plans for multijurisdictional areas. International perspectives of economic development and regional planning are also discussed.

Crosslisted as: CRP 4800.

## CRP 8900 - Professional Seminar (3)

Diverse issues relating to contemporary professional planning practice are studied through abbreviated case studies and presentations by visiting specialists and participants in the planning process. Interrelated social, economic, political, and physical factors affecting specific planning situations are studied. Current and emerging roles for professional planners are discussed and analyzed.

Prerequisite: CRP major.

## CRP 8976 - Selected Topics, Community and Regional

 Planning (1-6)Group investigation of a topic in community and regional planning and development.

Prerequisite: Permission. Crosslisted as: CRP 4970.

## CRP 8980 - Special Problems in Community and Regional Planning (1-6)

Individual or group investigations of problems relating to community and regional planning.
Prerequisite: MCRP degree candidate or permission.

## CRP 9000 - Professional Planning Practice (3)

Current concepts, ideas, and issues relating to professional planning practice are studied. The course examines the contexts of planning practice, the professional planner's relationship to society, ethics in professional planning practice, and political and organizational behavior in plan making and policy implementation. Roles of citizens, client groups, and consultants in the planning process are explored. Forms of collaborative problem solving, including meditation and negotiation, are explored. Planning office and project management issues and approaches, including personnel administration and project financing and budgeting, are discussed.

Prerequisite: CRP 4000/8006 or concurrent.

## CSCI - Computer Science

## CSCI 8000 - Advanced Concepts in Programming Languages (3)

This course studies the concepts and properties of programming languages in general. It covers the syntax of major programming languages such as the imperative, functional, and logic programming languages, and the semantics of programming languages such as those dealing with concurrency and object oriented programming. Topics in formal language theory, parsing, and formal methods of syntax description are also covered.

Prerequisite: CSCI 3320.

## CSCI 8010 - Foundations of Computer Science (3)

This is a foundational course for students enrolled in the graduate program in computer science. The objectives are to introduce students to a large body of concepts so that they are better prepared for undertaking the core courses in the graduate program. It is assumed that student would have programmed in a high-level language and have exposure to basic college level mathematical concepts such as logarithms, exponents, sequences, and counting principles.
Prerequisite: There are no pre-requisite courses to take this course. Students are expected to have written programs using some high-level programming language. Students should be familiar with basic mathematical concepts including exponents, logarithms, sequences, and counting principles.

## CSCI 8050 - Algorithm Graph Theory (3)

Review of the basic concepts of graphy theory. Introduction to perfect graphs and their characterizations. Main classes of perfect graphs and their properties. Algorithms for main problems of perfect graphs.
Applications of perfect graphs in several fields such as scheduling, VLSI and communication networks.

Prerequisite: CSCI 3320/8325 and MATH 4150/8156 or permission of instructor. Crosslisted as: MATH 8050.

## CSCI 8060 - Algorithmic Combinatorics (3)

Classical combinatorial analysis graph theory, trees, network flow, matching theory, external problems, block designs.

Prerequisite: MATH/CSCI 3100/8105. Crosslisted as: MATH 8060.

## CSCI 8070 - Genetic Algorithms (3)

This course introduces the student to the fast growing field of genetic algorithms. The course covers the basic concepts of genetic algorithms and their implementations. Case studies from different fields such as chip design, scheduling, and information gathering are used to illustrate how genetic algorithms can be used to solve important problems effectively.

Prerequisite: CSCI 3320/8325; bachelor degree and permission from the graduate program committee.

## CSCI 8080 - Design and Analysis of Algorithms (3)

The study of algorithms important in computer programming. Principles and underlying concepts of algorithm design, fundamental techniques of algorithm analysis, typical types of algorithms and computer architecture.

Prerequisite: CSCI 3320/8325 or equivalent. Crosslisted as: MATH 8080.

## CSCI 8100 - Expert Systems (3)

A study of the theoretical basis and practical design of expert systems. Knowledge engineering. Foundations in logic programming, the architecture of expert systems, languages (Prolog, LISP) for expert systems, expert system shells, knowledge acquisition, current issues.

Prerequisite: CSCI 4450/8456 or equivalent.

## CSCI 8110 - Advanced Topics in Artificial Intelligence

 (3)An in-depth study of one or more topics selected from: search techniques, knowledge representation, knowledge programming, parallel processing in Artificial Intelligence, natural language processing, image processing, current and future directions, etc. May be repeated with different topics, with permission of adviser.

Prerequisite: CSCI 4450/8456 or equivalent.
CSCI 8150 - Advanced Computer Architecture (3)
Various parallel architectures, models of parallel computation, processor arrays, multiprocessor systems, pipelined and vector processors, dataflow computers and systolic array structures.

Prerequisite: CSCI 4350, 4500 and graduate.

## CSCI 8160 - Introduction to VLSI Design (3)

Introduction to the principle concepts of integrated circuit layout. Presentation of the hardware foundations, algorithmic mathematical and graph theoretical foundations of circuit layout. Partitioning problems in integrated circuits. Placement and floor planning phase in layout. Routing algorithms and compaction techniques. Applications of graph theory in several steps of the design process of VLSI circuits.

Prerequisite: CSCI 3320/8325 and CSCI 4350/8356 or permission of instructor.

## CSCI 8170 - VLSI Testing (3)

This course covers topics in VLSI testing. In particular, topics covered include fault modeling, fault simulation, test generation, testability profiles, built-in tests, and binary decision diagrams.

Prerequisite: Bachelors degree and permission from the Graduate Program Committee; CSCI 4350.

## CSCI 8200 - Interconnection Networks (3)

This course is to introduce the technology of interconnection networks from topology of networks, through routing and flow control, to a discussion of hardware/software fault tolerance, and to understand parameters affecting performance.

Prerequisite: Bachelors degree and permission from the Graduate Program Committee; CSCI 4550 or equivalent.
CSCI 8210 - Advanced Communication Networks (3)
Advanced study of communication networks, analysis of communication needs, special problems encountered in different types of networks, efficiency and traffic analysis and emerging hardware software technologies. Detailed 'hands-on' study of the TCP/IP networking protocols.

Prerequisite: CSCI $3550 / 8555$ or equivalent.

## CSCI 8220 - Telecommunications Management (3)

This course will focus on the management required to operate today's complex telecommunications networks. The course will be based on the standards that are currently in place as well as examining the future directions. The student, upon the successful completion of this course, will have: an operational knowledge of the components of complex telecommunications networks, the management
structures and computer systems needed to maintain that network, and the security solutions used to protect that network.

Prerequisite: Acceptance into the Graduate program of CSCI or MIS or by permission of the instructor. Crosslisted as: ISQA 8230.

## CSCI 8256 - Human Computer Interaction (3)

This course consists of topics related to the design, implementation, and evaluation of human-machine systems. Topics include the joint performance of tasks by humans and machines; user psychology (attention perception, cognition, metaphors, learning); ergonmics; advanced interfaces (virtual reality, adaptive interfaces); low and high fidelity prototyping methods and evaluation methods.

Crosslisted as: CSCI 4250.

## CSCI 8300 - Image Processing and Computer Vision (3)

This course introduces the computer system structures and programming methodologies for digital image processing and computer vision. The course will cover the mathematical models of digital image formation, image representation, image enhancement and image understanding. Techniques for edge detection, region growing, segmentation, two-dimensional and threedimensional description of object shapes will be discussed. The course will concentrate on the study of knowledgebased approaches for computer interpretation and classification of natural and man-made scenes and objects.
Prerequisite: CSCI 1620, CSCI 3320.

## CSCI 8306 - Deterministic Operations Research

 Models (3)This is a survey course of deterministic operations research models and algorithms. Topics include linear programming, network programming, and integer programming.

Prerequisite: MATH 2050. Crosslisted as: MATH 4300 and CSCI 4300 and MATH 8306.

## CSCI 8340 - Data Base Management Systems II (3)

A continuation of the study of Data Base Management Systems. Extended discussion of logical data base design, normalization theory, query optimization, concurrent issues. Advanced topics including distributed data bases, deductive data bases, data base machine, and others.

Prerequisite: CSCI 4850/8856 or equivalent.

## CSCI 8350 - Data Warehousing and Data Mining (3)

Covers topics related to decision support queries. In particular, topics covered include building data warehouses, On-Line Analysis Processing (OLAP),
maintenance of materialized views, indexing, various data mining techniques, and integration of OLAP and data mining.

Prerequisite: CSCI 4850/8856; bachelors degree and permission from Graduate Committee.

## CSCI 8360 - Information Storage and Retrieval (3)

The course presents basic techniques for analyzing, indexing, representing, storing, searching, retrieving, and presenting desired information in information storage and retrieval systems. Models, document processing, thesauri, evaluation of system effectiveness, as well as special hardware will be discussed. Selected advanced topics will also be covered.

Prerequisite: CSCI 4850/8856 (DBMSI); bachelors degree and permission from Graduate Program Committee.

## CSCI 8366 - Foundations of Information Assurance (3)

Contemporary issues in computer security, including sources for computer security threats and appropriate reactions; basic encryption and decryption; secure encryption systems; program security, trusted operating systems; database security, network and distributed systems security, administering security; legal and ethical issues.

Prerequisite: CSCI 3320/8325 OR ISQA 3300 OR By instructor permission. Crosslisted as: IASC 8366 and IASC 4360.

## CSCI 8390 - Advanced Topics in Data Base Management Systems (3)

An in-depth study of one or more topics in the field of Data Base Management Systems, such as logical and/or physical data base design, query optimization, distributed data bases, intelligent knowledge-based systems, emerging technologies and applications. May be repeated with different topics with permission of adviser.
Prerequisite: CSCI 4850/8856 or equivalent.
CSCI 8400 - Advanced Computer Graphics (3)
This course covers advanced rending and modeling techniques. Topics covered include: Three-dimensional viewing, visible-surface detection methods, illumination models and surface rendering methods, color models and color applications, and computer animation.
Prerequisite: Bachelors degree and permission from the Graduate Program Committee; CSCI 4620/8626.

## CSCI 8410 - Distributed System and Network Security

 (3)This course is a detailed analysis of information security in the context of distributed systems and networks. Topics include: threats developed in the distributed systems and networks; security policies and mechanisms; the
integration of secure services include secure mail, web services, and wireless; and ways to mitigate threat, including firewalls and intrusion detection systems.

Prerequisite: CSCI 8366 or equivalent(s); or instructor permission.

CSCI 8420 - Secure Information Systems Assurance (3)
The course will investigate the choices among security features and secure system architecture options; the range of secure system specification and design options; the Capability Maturity Model, the Trusted Software Development Methodology; evaluation of security technology; the formal product evaluation of security technology and the relationship between them to include the assorted criteria starting with the Orange Book and the TPEP process culminating with Common Criteria and the NIAP.

Prerequisite: CSCI 8366 or equivalent; or permission of instructor.

## CSCI 8430 - Trusted System Design, Analysis and Development (3)

This course examines in detail: the principles of a security architecture, access control, policy and the threat of malicious code; the considerations of trusted system implementation to include hardware security mechanisms, security models, security kernels, and architectural alternatives; the related assurance measures associated with trusted systems to include documentation, formal specification and verification, and testing, and approaches that extend the trusted system, into applications and databases and into networks and distributed systems.

Prerequisite: CSCI 8366 or equivalents, or instructor permission.

## CSCI 8440 - Secure Systems Engineering (3)

Secure Systems Engineering is the capstone course of the information assurance concentration. This course will bring together and focus the various topics presented in the prerequisite classes on the development of system level security solutions. The objective of the course is to equip the student with a global view of the process of designing and developing and fielding secure information systems.

Prerequisite: CSCI 8366, 8410, 8420 and 8430.

## CSCI 8446 - Introduction to Parallel Computing (3)

Need for higher-performance computers. Topics discussed include: classification of parallel computers; sharedmemory versus message passing matchings; for ms of parallelism, measure of performance; designing parallel algorithms; parallel programming and parallel languages; synchorization constructs; and operating systems for parallel computers.

Prerequisite: CSCI 4500/8506 (May be taken concurrently). Crosslisted as: CSCI 4440.

## CSCI 8456 - Introduction to Artificial Intelligence (3)

An introduction to artificial intelligence. Machine problem solving, game playing, pattern recognition and perception problems, theorem proving, natural language processing, machine learning, expert systems and robotics.

Prerequisite: CSCI 3320/8325. Crosslisted as: CSCI 4450.
CSCI 8460 - Integer Programming (3)
Advanced study in mathematical programming with integer or mixed integer variables. Topics include integer programming, model creation, developing solution algorithms, and applications of integer programming.
Prerequisite: MATH 2030 or MATH 2230. Crosslisted as: MATH 8460.

CSCI 8480 - Multi-agent Systems and Game Theory (3)
This course covers advanced topics in the area of coordination of distributed agent-based systems with a focus on computational aspects of game theory. The main topics covered in this course include distributed constraint satisfaction, distributed constraint optimization, and competitive and cooperative game theory.

Prerequisite: CSCI 4450/8456: Introduction to Artificial Intelligence. Suggested background courses: CSCI 4480/8486: Introduction to Multi-agent/Multi-robot Systems; CSCI 8080: Design and Analysis of Algorithms. Crosslisted as: MATH 8480.

## CSCI 8486 - Introduction to Multi-agent and Multirobot Systems (3)

This course discusses techniques used in multi-agent systems and how to use those techniques for controlling robots in multi-robot systems.

Prerequisite: CSCI 3320/8325 - Data Structures CSCI 4450/8456 - Introduction to Artificial Intelligence is recommended but is not essential for gaining a basic understanding of most of the topics in this course. Crosslisted as: CSCI 4480.

## CSCI 8500 - Advanced Numerical Methods I (3)

Topics covered in this course include error propagation, solutions of linear equations by various schemes, matrix norms and conditioning, and computation of eigenvalues and eigenvectors.
Prerequisite: MATH 1960 and MATH 2050. Familiarity with computer programming is assumed. Crosslisted as: MATH 8500.

CSCI 8506 - Operating Systems (3)
Operating System principles. The operating system as a resource manager; I/O programming, interrupt
programming and machine architecture as it relates to resource management; memory management techniques for uni-multiprogrammed systems; process description and implementation; processor management (scheduling); I/O device, controller and channel management; file systems. Operating system implementation for large and small machines.

Prerequisite: CSCI 2620, 3320, MATH 1950.
Recommended: CSCI 4350. Crosslisted as: CSCI 4500.

## CSCI 8510 - Advanced Numerical Methods II (3)

This course provides advanced study of numerical solutions of partial differential equations.
Prerequisite: MATH 1970, MATH 2350, and either MATH 3300/8305 or MATH 4330/8336 or MATH 8500. Familiarity with computer programming is assumed. Crosslisted as: MATH 8510.

## CSCI 8520 - Advanced Topics in Operations Research (3)

Advanced treatment of a specific topic in the area of operations research not available in the regular curriculum. Topics, developed by individual faculty members, will reflect their special interests and expertise. The course may be repeated for credit as topics differ.

Prerequisite: MATH/CSCI 4300/8306 or permission of the instructor. Crosslisted as: MATH 8520.

## CSCI 8530 - Advanced Operating Systems (3)

State of the art techniques for operating system structuring and implementation. Special purpose operating systems. Pragmatic aspects of operating system design, implementation, and use.

Prerequisite: CSCI 4500/8506. Crosslisted as: CSCI 4510.

## CSCI 8536 - File Structures (3)

File structures is an introduction to the principles behind the design and manipulation of file structures. This course gives special emphasis to the complexity analysis of algorithms used to implement the storage and retrieval of data to/from bulk storage devices and programming techniques for large data manipulation.
Prerequisite: CSCI 3320 and CSCI 1840.
CSCI 8540 - Advanced Data Structures (3)
A theoretical study of the design and analysis of data structures and efficient algorithms for manipulating them. Emphasis is placed on developing the fundamental principles underlying efficient algorithms and their analysis.
Prerequisite: CSCI 3320/8326 or equivalent.

## CSCI 8550 - Advanced Operating System Theory (3)

An advanced study of modern operating systems. Intended for graduate students who have mastered the fundamental material in an undergraduate course. Emphasis on advanced theoretical material on topics introduced in undergraduate courses, and material not generally covered in undergraduate courses. Advanced material on process synchronization, deadlock, virtual memory, and new material on parallel processing, security, distributed systems and control, object- oriented programming, and modeling and analysis.

Prerequisite: CSCI 4500/8506. Recommended: CSCI 4510/8516.

## CSCI 8566 - Number Theory \& Cryptography (3)

From number theory: Factorization of Integers, Congruence Arithmetic, Primitive Roots, and Quadratic Residues and Reciprocity. In the area of secure communication: Hashing Functions, Character, Block and Stream Ciphers and the Cryptanalysis. Symmetric Key Cryptosystems such as DES, and also Public-Key Cryptosystems such as RSA and EIGamal. Also DiffieHellman Key Exchange, Digital Signatures, Secret Sharing, and Zero-Knowledge Proofs.

Prerequisite: MATH 2230 or MATH 2030. Crosslisted as: MATH 4560 and MATH 8566 and CSCI 4560.
CSCI 8610 - Fault Tolerant Distributed Systems (3)
This course is to study the theory and practice of designing computer systems in the presence of faulty components. Emphasizes the basics of how faults can affect systems and what is required to mask or compensate for their efforts.

Prerequisite: CSCI 4500 and CSCI 4350, or instructor permission.

CSCI 8620 - Mobile Computing and Wireless Networks (3)

Contemporary issues in mobile computing and wireless networks, including the differences between mobile computing and the traditional distributed computing paradigm, impediments of the mobile and wireless environments, problems and limitations due to such impediments, using the spectrum, wireless data networks, various network layers solutions, location management techniques, mobile IP, wireless LANs, wireless TCP, ad hoc networks, performance issues, security issues.

Prerequisite: CSCI 3550/8555.
CSCI 8626 - Computer Graphics (3)
An introduction to the acquisition, manipulation and display of graphical information using digital techniques. Topics include discussion of the various hardware devices used for input and output, the classical algorithms and data structures used in manipulation of graphical objects, the
user interface to the graphics system, and applicable standards.

Prerequisite: MATH 2050 and CSCI 3320/8325. Crosslisted as: CSCI 4620.

## CSCI 8690 - Advanced Topics in Parallel and Distributed Computing (3)

This course offers advanced study of parallel computing at the graduate level. It covers several parallel programming paradigms such as: shared-memory programming, distributed-memory programming, object oriented programming, data parallel programming, functional dataflow programming. The course also covers other advanced topics such as: scheduling parallel programs, parallel troops, parallelizing sequential programs, parallel programming support environments, and design and analysis of parallel algorithms. The course gives the students the opportunity to re-think programming from an entirely fresh perspective.

Prerequisite: CSCI 4500/8506 or equivalent.

## CSCI 8700 - Software Specification and Design (3)

A continuation of the study of software engineering with an emphasis on early phases of software development, namely requirements engineering/specification and design. Fundamentals of quality software design. In-depth study of various software requirements specification and design techniques. Related topics such as metrics and CASE tools.

Prerequisite: 4830/8836 Introduction to Software Engineering.

## CSCI 8710 - Modern Software Development Methodologies (3)

Designed to introduce students to advanced object technology and other modern methodologies for developing software systems. Intended for graduate students who have mastered the basic concepts and issues of software engineering. Course covers advanced objectoriented software development. The course also covers several offshoots of object technology, including: component-based software engineering, aspect-oriented software development, software product line engineering, service-oriented computing, etc.

Prerequisite: CSCI 4830/8836.

## CSCI 8760 - Formal Methods in Software Engineering (3)

In the high consequence system domain, a primary objective of any construction technique employed is to provide sufficiently convincing evidence that the system, if put into operation, will not experience a high consequence failure or that the likelihood of such a failure falls within acceptable probabilistically defined limits. Systems for which such evidence can be provided are called high assurance systems. The objective of this course is to
examine software-engineering techniques across the development life cycle that are appropriate for high assurance systems. The course will analyze the nature of the evidence provided by various techniques (e.g., does a given technique provide sufficiently strong evidence in a given setting).

Prerequisite: CSCI 8000 and CSCI 8836/4830.

## CSCI 8790 - Advanced Topics in Software Engineering (3)

An in-depth study of one or more topics in the field of software engineering such as human factors in software engineering, software specifications and modeling, reuse and design recovery, software valuations, software management, emerging technology and applications.

Prerequisite: CSCI 4830/8836.

## CSCI 8850 - Advanced Automata and Formal Languages (3)

A continuation of MATH/CSCI 4660/8666. The course will be an introduction to Computational Complexity. Topics that will be covered include space and time complexities of Turing Machines, deterministic versus non-deterministic machines, NP-Complete problems, alternating Turing machines, and concepts of reducibility.

Crosslisted as: MATH 8850.

## CSCI 8856 - Data Base Management Systems (3)

Basic concepts of data base management systems (DBMSs). The relational, hierarchical and network models and DBMSs which use them. Introduction to data base design.

Prerequisite: CSCI 3320/8325. Crosslisted as: CSCI 4850.

## CSCI 8876 - Database Search and Pattern Discovery in Bioinformatics (3)

The course provides students basic knowledge on database aspects related to bioinformatics. In order to make this course self-contained, it starts with a brief introduction on key concepts in computational molecular biology, as well as a review of database management systems, artificial intelligence and related aspects in computer science. The major part of this course will cover various issues related to biodatabase search and pattern discovery

Prerequisite: CSCI3320. Crosslisted as: BIOI 4870.

## CSCI 8910 - Master of Science Capstone (3)

The capstone course is to integrate coursework, knowledge, skills and experimental learning to enable the student to demonstrate a broad mastery of knowledge, skills, and techniques across the Master degree curriculum of Computer Science for a promise of initial employability and further career advancement. The course is designed to be in a student-centered and student-directed manner
which requires the command, analysis and synthesis of knowledge and skills. Students may apply their knowledge and skill to a project which serves as an instrument of evaluation. Students are encouraged to foster an interdisciplinary research and cultivate industry alliances and cooperation in this course.

Prerequisite: This capstone course is open to graduate students enrolled in the Master's degree of Computer Science with course-only option (program III). This capstone course should be taken only after students have completed at least $3 / 4$ of course requirements for the major. Those who have not made sufficient progress toward degree completion are prohibited from enrolling. Under certain circumstances, students may have the instructor's written permission to register for the course.

## CSCI 8915 - Data Structures and Algorithms (3)

The purpose of this course is to introduce the student to several basic and advanced data structures and their use in modeling and solving practical problems. The course also introduces basic techniques in algorithm design such as recursion, divide and conquer, and greedy techniques. Searching, sorting graph algorithms and the main concept of complexity theory are presented.

Prerequisite: CSCI 1910 or knowledge of C++ and a baccalaureate degree and approval of the computer science graduate program committee.

## CSCI 8920 - Advanced Topics in Computer Science (3)

An in-depth study, at the graduate level, of one or more topics that are not treated in other courses. May be repeated with different topics with permission of adviser.

Prerequisite: Permission of instructor; will vary with offering.

## CSCI 8950 - Graduate Internship in Computer Science (1-3)

The purpose of this course is to provide students with opportunities to apply their academic studies in environments such as those found in business, industry, and other non-academic organizations. The student interns will sharpen their academic focus and develop better understanding of non-academic application areas.

Prerequisite: Permission of the graduate program chairperson.

## CSCI 8960 - Thesis Equivalent Project in Computer

 Science (1-6)This course allows a graduate student to conduct a research project in computer science or a related area. The project is expected to place an emphasis on applied,
implementations-based, or experimental research. The process for development and approval of the project must include: appointment of supervisory committee (chaired by project adviser), a proposal approved by the supervisory
committee, monitoring of the project by the supervisory committee, an oral examination over the completed written product conducted by the supervisory committee, final approval by the supervisory committee. The approved written project will be submitted to the Office of Graduate Studies by the advertised deadlines.

Prerequisite: Permission of Graduate Adviser.

## CSCI 8970 - Independent Study (1-3)

Under this number a graduate student may pursue studies in an area that is not normally available in a formal course. The topics to be studied will be in a graduate area of computer science to be determined by the instructor.
Prerequisite: Permission of the Graduate Program Committee.

## CSCI 8980 - Graduate Seminar (1-3)

This course offers an up-to-date coverage of the contemporary and emerging concepts, models, techniques and methodologies, and/or the current research results in the fundamental areas of computer science. Topics to be covered by the course will vary in different semesters.
Prerequisite: Permission of the Instructor.
CSCI 8990 - Thesis (1-6)
A research project, designed and executed under the supervision of the chair and approval by members of the graduate student's thesis advisory committee. In this project the student will develop and perfect a number of skills including the ability to design, conduct, analyze and report the results in writing (i.e., thesis) of an original, independent scientific investigation.
Prerequisite: Permission of Graduate Adviser.
CSCI 8526 - Human-Computer Interaction (3)
CSCI 8556 - Communication Networks (3)
CSCI 9210 - Type Systems Behind Programming Languages (3)
Empirical evidence suggests that a large number of errors made when writing software can be detected by analyzing the behavior of the program from the perspective of type. This course provides an in-depth exploration of various type systems for programming languages.

Prerequisite: CSCI 8000.

## CSCI 9220 - Rewriting and Program Transformation

 (3)This course begins by exploring the foundations of term rewriting. Topics such as unification, confluence, completion and termination are covered. Then a strategic framework is considered in which the application of rewrite rules can be controlled.

## Prerequisite: CSCI 8000.

## CSCI 9340 - Computational Intelligence for Data Management (3)

The course provides students advanced knowledge on computational intelligence methods related to various aspects of data management. Rather than treating computational intelligence and database management systems separately, the course allows students to examine the integration of these two research disciplines. The emphasis is on how to apply computational intelligence methods to various data management problems.

Prerequisite: CSCI 8456 and CSCI 8856.
CSCI 9350 - Mathematical and Logical Foundations of Data Mining (3)
With the maturity of data mining techniques, it is extremely important to examine the foundations of data mining. Instead of providing coverage of basic data mining methods, the course will focus on methodology employed in data mining, logical and mathematical foundations of data mining, as well as other issues related to the intrinsic nature of data mining.

Prerequisite: CSCI 8456, CSCI 8856, and CSCI 8390.
CSCI 9410 - Advanced Topics in Logic Programming (3)

This course will examine some advanced topics in logic programming, inductive logic programming, and their parallel and distributed implementation. Each advanced topic will be followed by how it has been applied in practice to software development research. Advanced applications such as program analysis and verification will be covered in detail.

Prerequisite: CSCI 8000 and doctoral student standing in Information Technology or the permission of the instructor.

## CSCI 9420 - Intelligent Agent Systems (3)

This course covers the principles of interaction between agents in multi-agent systems using game theory. Relevant topics studied in this course include competitive games, statistical Bayesian games, cooperative games, and mechanism design. Students will have to implement projects related to the material studied in the course.

Prerequisite: CSCI 3320/8325: Data Structures and Algorithms CSCI 4450/8456: Introduction to Artificial Intelligence.

## CSCI 9710 - Foundations of Software Engineering Research (3)

This course provides guidelines on how to conduct research in the field of software engineering by presenting the research methods, classic readings, and development of theories and their application to real life problems. The
main emphasis of the course is to provide opportunity for in-depth study of topics such as modern software engineering development methodologies and process.

Prerequisite: CSCI 8836 or equivalent course and doctoral student standing in Information Technology or permission of the instructor.

## CSCI 9810 - Research Foundations in Theoretical Computing (3)

This course offers an up-to-date coverage of the contemporary and emerging concepts, models, techniques, and methodologies, and/or the current research results in the fundamental areas of theoretic computing. The course will examine advanced research topics in computer science and engineering, including foundations of automata theory, computability, complexity analysis, computational logics and algorithmic analysis, hybrid dynamic systems theory, number theory, adaptation and learning theory, concepts and principles in computational geometry, stochastic processes, and random optimization. Each topic will be discussed with a perspective of research issues and directions. Active student participation in investigation of the research topics, survey of the current state-of-art, and identifying the future research insights is required. Students will take turn presenting their research results on specific topics. Topics to be covered by the course will vary in different semesters.
Prerequisite: The prerequisites of this course vary depending on the areas to be covered in the semester the course is offered. Good standing in Ph.D. program is required. Permission of the instructor may be required for students to take this course.

## CYAF Child Youth and Family Studies

CYAF 8166 - Educational Programming (3)
Planning and implementing developmentally appropriate educational experiences for a variety of audiences in nonformal settings.
Prerequisite: Junior standing. Crosslisted as: CYAF 4160.

## CYAF 8886 - Child and Family Policy (3)

A detailed analysis of child and family policies including: what is family policy, how policy is made and implemented, how values and goals affect policy and future directions for child and family policies in America and other countries.

Prerequisite: Junior standing. Crosslisted as: CYAF 4880.
CYAF 8936 - Special Topics in Contemporary Family Issues (3)

Current issues such as debt management, gender and family, low income families, retirement planning, work and family, mothering, fathering, housing. Topics vary

Crosslisted as: CYAF 4930.
CYAF 8956 - Special Topics in Family and Cultural Diversity (3)

Focused investigation of current topics related to diverse populations, e. g. religion, sexual orientation, ethnicity.
Crosslisted as: CYAF 4950.
CYAF 8966 - Advanced Independent Study (1-5)
Individual projects in research, literature review, or creative production may or may not be an extension of course work.

Prerequisite: 12 hours course work in CYAF or social sciences. Work supervised and evaluated by CYAF faculty. Crosslisted as: CYAF 4960.
CYAF 8976 - Community Internships in CYAF (3-6)
Applied fieldwork in agencies serving children, youth, families and communities.
Prerequisite: 12 hours in CYAF or other social sciences and Junior standing. Crosslisted as: CYAF 4970.

CYAF 8986 - Research Experiences in Child, Youth And Family Studies (1-6)

Participation in an ongoing research project in child development/early childhood education, family science, marriage and family therapy, family financial management or Family and Consumer Sciences education

Prerequisite: 18 hours in CYAF and/or social sciences. A completed contract form is required before registering with a CYAF faculty. Crosslisted as: CYAF 4980.

CYAF 8996 - Masters Thesis (6-10)
Masters Thesis
Prerequisite: Admission to masters degree program and permission of major adviser.

CYAF 9966 - Scholarly Practice and Discovery (1-6)
Investigation related to Child, Youth And Family Studies
Prerequisite: Graduate and permission of instructor.

## ECON - Economics

## ECON 8010 - Seminar: Public Finance (3)

This course is designed to develop the tools of applied welfare economics and to use these tools to evaluate the expenditure and tax decisions of governments. The structure, effects and reform of the U.S. individual and corporate income taxes will be emphasized.

Prerequisite: ECON 3200 or 8210 or BSAD 8100 or permission.

## ECON 8020 - Environmental Economics and Management (3)

This course covers topics related to environmental economics and policy, with an emphasis on comparative policy analysis and business strategies towards the environment.

Prerequisite: Intermediate Microeconomics (ECON 3200) or Managerial Economics (ECON 8210, BSAD 8100), or permission of the instructor. Crosslisted as: BSAD 8020.

ECON 8050 - Economic Education (3)
A study and examination of economic principles and how they can be related to the teacher's classroom presentation. This course is designed to furnish the public school teacher ( $\mathrm{K}-12$ ) with sufficient background and understanding to aid in the recognition of economic issues and the teaching of economic concepts and principles.

Prerequisite: No previous course work in economics. Not open to Economics majors.

## ECON 8160 - Seminar in Labor Economics (3)

A study of the demand for labor, the supply of labor, the theory of compensating differentials, investment in human capital, worker mobility, discrimination, unions, inequality and unemployment.

Prerequisite: ECON 3200 or 8210 or BSAD 8100 or permission.

## ECON 8200 - Seminar in Micro Theory (3)

This course deals with the current state of microeconomic theory. The major topics covered are the theory of consumer behavior, theory of production and cost, theory of the firm, distribution theory and welfare theory.
Prerequisite: ECON 3200, 3220 and 8306 or permission.

## ECON 8210 - Managerial Economics (3)

Microeconomics for graduate students of business. Economic analysis of the business firm and its environments, with emphasis on market structure, production possibilities and cost factors. Additional consideration is given to the theory of the firm under conditions of uncertainty.
Prerequisite: Graduate student in economics and ECON 2200 or equivalent. Crosslisted as: BSAD 8100.

## ECON 8216 - Industrial Organization (3)

This course applies economic analysis to public policy issues in industrial economics. It is concerned with the strategic behavior of firms: the nature of interaction among competing firms within a game-theory framework. Among the topics covered are: discriminatory pricing, predatory conduct, product design, patent infringement, price wars, location decisions, and entry-deterrence.

Prerequisite: ECON 2200 and 2220, or BSAD 8180, or permission of instructor. Crosslisted as: ECON 4210.

## ECON 8220 - Seminar in Macro Theory (3)

This course traces the development of macroeconomic theory from the classical point of view to current schools of thought. Keynesian, neo-Keynesian and neo-classical models are developed.

Prerequisite: ECON 3200 or 8210 or BSAD 8100, ECON 3220, and ECON 8306, or permission.

## ECON 8230 - Business Conditions Analysis (3)

This course is concerned with the statistical measurement and evaluation of general business conditions, and the adaptation of business policies to changing business conditions. Emphasis is placed upon the practical application of statistical techniques of analysis to the business situation, within the framework of the aggregate economy.
Prerequisite: ECON 2200 or BSAD 8180.

## ECON 8266 - History of Economic Thought (3)

The first half of the course focuses on the development of economics from Adam Smith in 1776 to John Maynard Keynes in the 1930s. The second half of the course uses the history sketched in the first half as a partial basis for addressing important questions about the methodology, institutional structure and policy impact of economics.
Prerequisite: ECON 2200 and 2220, or BSAD 8180, or equivalent. Crosslisted as: ECON 4260.

## ECON 8270 - Contemporary Economics for Business Management (3)

Only students who have been admitted to the Executive MBA program may take this course. This course will familiarize students and professionals with the microeconomic and the macroeconomic principles relevant to: (a) individual and business firm decision-making; (b) the domestic and international environment in which economic decisions are made; and (c) the evaluation of policies designed to solve economic problems.

Prerequisite: Graduate in Executive MBA program.
ECON 8296 - Research Methods in Economics and Business (3)

Covers the methodology of economics: choosing a research topic, literature search tools, data source identification, data summary techniques, basic statistical data analysis using statistical packages, and clear economics writing. The student will become familiar with these techniques through text materials, journal studies, and completion of an empirical economics paper.

Prerequisite: Econ 2200 (Principles of Economics--Micro); Econ 2220 (Principles of Economics--Macro); For grad:
graduate standing. Crosslisted as: ECON 4290 and BSAD 8026.

## ECON 8300 - Econometrics (3)

The study of the underlying assumptions, techniques and applications of single and multiple equation regression analysis in economics.

Prerequisite: Basic Statistics, ECON 8306 (4300) and 8296 (4290), or permission.

## ECON 8306 - Quantitative Applications in Economics and Business (3)

The study and application of modern quantitative techniques to problem-solving in economics and business.

Prerequisite: ECON 2200 and 2220, or BSAD 8180.
Crosslisted as: ECON 4300.

## ECON 8310 - Business Forecasting (3)

This course includes a comprehensive survey of forecasting methods and in-depth study of selected techniques most commonly used in business environments. Emphasis is given to applications and therefore students will be required to develop forecasting models and test their performance as part of the course.
Prerequisite: BSAD 8000 or equivalent or ECON 8300 or permission of instructor. Crosslisted as: BSAD 8080.

## ECON 8326 - Natural Resource Economics (3)

Energy, minerals, fisheries, water, land, pollution and congestion are among the topics. The course covers the basic theoretical framework for understanding the optimal rate of resource use, identifies the factors which determine the actual rate of use, and considers and evaluates various public policy prescriptions.

Prerequisite: ECON 2200 and 2220, or BSAD 8180, or permission of instructor. Crosslisted as: ECON 4320.

## ECON 8346 - Economics of Technology (3)

The seminar discusses whether innovation is more driven by demand or supply forces, the optimal timing of adoption of new technology, whether new technology benefits workers and consumers, and whether government is successful at supporting promising new technology.
Prerequisite: ECON 2200 or BSAD 8180 or permission of the instructor. Crosslisted as: ECON 4340.

## ECON 8450 - Seminar in Money and Banking (3)

Original research and writing of papers on basic problems in the area of money and banking.

Prerequisite: Six hours in undergraduate monetary courses or permission of the instructor.

## ECON 8456 - Monetary Theory and Policy (3)

Monetary policy has an important effect on economic magnitudes, including the level of output, interest rates, inflation rates, exchange rates, and many other variables. This course provides an in-depth analysis of the role that the Federal Reserve plays in our economy. This involves how monetary policy is transmitted to various markets.

Prerequisite: ECON 3220 or permission of the instructor. Crosslisted as: ECON 4450.

## ECON 8480 - Economic Theory: Economics for Managerial Decisions (3)

Only students who have been admitted to the Executive MBA program may take this course. This course will teach students analytical techniques based on the theory of the firm for application to business management decisions. Emphasis will be placed upon bridging the gap between economic theory and management practice. The student will learn to evaluate the impact on the firm of national and international market conditions and policies.

Prerequisite: Graduate in Executive MBA program and ECON 2200 and 2220, or ECON 8180, or the initial economics course in the Executive MBA course sequence.

## ECON 8566 - State and Local Finance (3)

Theoretical and policy analysis of state and local government fiscal behavior. Revenues, expenditures, borrowing, and intergovernmental fiscal relations. Applications to education, transportation, and economic development.

Prerequisite: ECON 2200 and 2220, or BSAD 8180, or equivalent or permission of the instructor. Crosslisted as: ECON 4560.

## ECON 8580 - International Business and Economics (3)

Only students who have been admitted to the Executive MBA program may take this course. The nature, behavior and economic environment of international business are surveyed in this course. The focus will be on the development of international business opportunities by the domestic and multinational firms as they interact with their environments. This course provides a knowledge of the development of international opportunities as they are influenced by international trade, monetary economics, finance and management. As such, the course is multidisciplinary.

Prerequisite: Graduate in Executive MBA program.

## ECON 8600 - Health Economics (3)

This course is designed to help students understand how the theories and models of economics can be applied to the study of health and health care. The examination of the markets (demand and supply) for health, health care and health insurance is stressed. In addition, the economic
analytic tools such as microeconomic theories and economic evaluation methods also will be reviewed and introduced. The objective of this course is to equip students with the knowledge tools to examine and analyze the problems issues of health care from the perspective of economics.

Prerequisite: ECON 2200 or equivalent.

## ECON 8616 - International Trade (3)

An analysis of the character of international economic relations. Subjects covered include the economic basis for international specialization and trade, the economic gains from trade, commercial policy, economic integration, and economic growth.
Prerequisite: ECON 2200 and 2220, or BSAD 8180, or permission of instructor. Crosslisted as: ECON 4610.

## ECON 8626 - International Monetary Economics (3)

An analysis of the international monetary system. Subjects covered include the balance of payments adjustment mechanism, alternative exchange rate systems, external effects of monetary and fiscal policy, foreign investments and international monetary reform.
Prerequisite: ECON 2200 and 2220, or BSAD 8180, or permission of instructor. Crosslisted as: ECON 4620.

## ECON 8650 - Seminar in International Economics (3)

An analysis of the theory of international trade and the working of the international monetary system.

Prerequisite: ECON 3600 or 4660 or permission of instructor.

## ECON 8666 - International Economic Development (3)

This course deals with the economics of developing countries. It introduces theories of development and endogenous growth. It analyzes domestic problems such as income distribution, population growth, unemployment, urbanization and education. It also analyzes international economic issues such as trade, foreign investment and debt, It discusses government development policies.
Prerequisite: ECON 2200 and 2220, or BSAD 8180, or permission of instructor. Crosslisted as: ECON 4660.

## ECON 8690 - Special Topics in Economic Education (1

 -3)This course focuses on instructional innovations in K-12 economic education i.e., economic issues, new teaching strategies, and innovative curriculum materials. In addition to learning about these issues, strategies, and materials, students develop plans for introducing them into their classrooms and assessing the impact of these instructional innovations. Not open to economic majors.
Prerequisite: Permission from instructor.

## ECON 8706 - Economics of eBusiness (3)

The course will be conducted mainly as a seminar with ample student participation, including a research paper. A 'New Economy' has often been identified with the rise of ebusiness. We will examine whether the rise of e-business has brought with it a change in the rules of the economy, and we will look at the effects of e-business on business, labor, consumers, and the stock market.
Prerequisite: Admission to the MBA program or the Economics graduate program or permission of the instructor. Crosslisted as: ECON 4700 and BSAD 8706.

## ECON 8736 - Economics of Entrepreneurship (3)

This course will review economic theories of entrepreneurship with special emphasis on Schumpeter's theory of creative destruction. The main focus of the seminar will be on the "high-level" entrepreneurship that sometimes results in major innovations. This course will address the societal benefits of entrepreneurship, factors influencing entrepreneurial success, the policies that best encourage entrepreneurship, and how firms can survive and prosper in an entrepreneurial environment.
Prerequisite: ECON 2200 or permission of the instructor for all students. Crosslisted as: ECON 4730 and BSAD 8736.

## ECON 8850 - Seminar in Urban Economics (3)

An examination of the theoretical basis for the analysis of urban economic problems with emphasis upon the policy alternatives applicable toward their possible solution.

Prerequisite: At least six hours of upper division course work in economics or permission of the instructor.

ECON 8870 - Seminar in Regional Economics (3)
An examination of the current developments and issues involving regional economic development and planning. These courses provide the theoretical basis for understanding and analyzing economic problems of a regional nature. In addition, policy alternatives, decisionmaking and measurement techniques are examined.
Prerequisite: At least six hours of upper division course work in economics or permission of instructor.

## ECON 8910 - Special Studies in Economics (1-3)

(May be repeated up to 6) A series of special courses, each designed to focus on current major issues and developments in a specific area of economics or business, scheduled as a workshop or seminar according to purpose.

Prerequisite: Graduate student in good standing and as indicated for specific workshop or seminar.
ECON 8916 - Special Topics in Economics (1-3)
(May be repeated up to 6) A series of special courses each designed to focus on current major topics and
developments in a specific area of economics or business, scheduled as a workshop or seminar according to purpose.

Prerequisite: Graduate student in good standing or advanced undergraduate student and as indicated for specific workshop or seminar. Crosslisted as: ECON 4910 and BSAD 8916.

## ECON 8920 - Independent Study (1-3)

Guided independent study and research under tutorial supervision.

Prerequisite: Graduate student in economics and permission of instructor.

## ECON 8930 - Independent Study (1-3)

Guided independent study and research under tutorial supervision.

Prerequisite: Graduate student in economics and permission of instructor.

## ECON 8940 - Economic Internship (1-3)

Guided internship in a firm or organization that makes use of, or extends, the student's skill in economics.

Prerequisite: Completion of at least nine hours of graduate level economics and permission of instructor.

ECON 8990 - Thesis (1-6)
An independent research project, written under the supervision of a graduate adviser in the department of economics. Approval of the topic and the completed project by departmental committee is required.

ECON 8500 - Seminar in Urban Economics (3)
ECON 8530 - Banking and Financial Markets (3)
ECON 8540 - Multinational Financial Management (3)
ECON 9816 - Special Topics in Economics (3)
EDAD - Educational Administration
EDAD 8000 - Special Studies in Educational Leadership (3)

This course will provide candidates in educational leadership with the opportunities and experiences of indepth study of a specialized area of practice and research in school leadership.

Prerequisite: Admission to Graduate Studies or permission of instructor.

EDAD 8020 - Governance and Politics in Education (3)
This course explores the expanded federal and state presence in local school districts. Historical and political factors influencing the governance of today's schools are discussed, as well as current trends. This course will
prepare educational leaders as dedicated practitioners, reflective scholars, and responsible citizens.

Prerequisite: EDAD 8030 (previously or concurrently)

## EDAD 8030 - Introduction to Educational Leadership (3)

This course is designed to introduce the beginning school leadership candidate to theories and practices of organization, motivation, leadership, and change processes, in order to develop an understanding of schools as complex organizations and the nature and challenges of leadership.

Prerequisite: Prerequisite for EDAD 8030 is admission to the Graduate Program and admission to the Department of Educational Administration and Supervision or admission to the Graduate Program and instructor permission.

## EDAD 8050 - School-Community Relations (3)

This course helps candidates for school teaching and administration positions develop an understanding of school-community relations, practice the skills of engaging education stakeholders, and refine the dispositions of responsible citizenship by responding to diverse community needs.
Prerequisite: Prerequisites for EDAD 8050 are admission to the Graduate Program and EDAD 8030 Introduction to Educational Administration or instructor permission.

EDAD 8060 - Planning for Safe and Orderly Schools (3)
This course examines the components of school wide discipline policies, programs, and problems from an administrative point of view. Candidates will assess strengths and weaknesses of policies and approaches to student behavior management, and will have an opportunity to apply ideas through case study situations.

Prerequisite: Prerequisites for EDAD 8060 are admission to the Graduate College.

## EDAD 8100 - Independent Study in Educational Leadership (1-6)

This course is designed to allow graduate candidates in educational leadership to pursue independent study of a topic under the direction and guidance of a faculty member. Topics studied and the nature of the learning activities are mutually agreed upon by the candidate and instructor. This course will prepare school leaders as practitioners and researchers who can meet the dynamic challenges of education.

Prerequisite: Admittance to the doctoral program in educational administration/leadership, or instructor permission.

## EDAD 8250 - Technology for School Leaders (3)

A course designed for current and aspiring school leaders. The course content will relate to the ways in which
technology can support the leadership and management of schools. Embracing the College of education theme, \'Preparing Professionals to Serve the Communityl', the course for school leaders is planned to include administration of the school site and system. This course is specifically designed to address the technological needs of school leaders.

Prerequisite: Admission to Graduate College.

## EDAD 8400 - Elementary School Practicum in Educational Administration and Supervision (3)

This capstone course is designed to provide practice in elementary and general administration and supervision according to the interests and needs of the candidates. Candidates will work with a practicing administrator and a university supervisor.

Prerequisite: Candidates must be enrolled in the Master's and/or the Endorsement program in Educational Administration and be in their last year of the program. Candidate must apply by November 30 for the spring practicum and by April 30 for the fall practicum. Permit required to enroll.

## EDAD 8470 - Administration and Supervision in Schools (3)

This course is designed to prepare educational leaders as dedicated practitioners, reflective scholars, and responsible citizens as they relate to the administration of a school site and system. This course is specifically designed to address the problems, issues, and opportunities of building level leadership.

Prerequisite: Admission to Graduate College.

## EDAD 8490 - Leadership in Curriculum and Instruction (3)

This course is designed to help candidates develop an understanding of aspects of leadership and supervision in curriculum and instruction. School leaders serve as instructional leaders in their buildings and districts. This course assists candidates in developing knowledge and practicing skills necessary to lead schools in the areas of instruction and curriculum.

Prerequisite: Admission to the Graduate College and EDAD 8030 (previously or concurrently).

## EDAD 8550 - School Business Management (3)

This course will analyze the functions of school business management: budgetary processes, financial accounting, auditing and reporting, management of funds, purchasing procedures, transportation, food services, insurance and inventory control.
Prerequisite: EDAD 8030 (previously or concurrently).

## EDAD 8560 - School Finance (3)

This course provides a study of the current sources of school financing: local, state, and federal. In addition to a review of the history of school finance, emphasis is placed on current problems in school finance, especially those related to overseeing the financial aspects of a school district.

Prerequisite: EDAD 8550, School Business Management or permission of the instructor.

## EDAD 8620 - School Plants and Equipment (3)

This course is designed for aspiring superintendents and central office leaders. It will prepare school leaders to be proactive in developing specifications for school buildings that will enhance educational processes. It includes planning procedures for new and remodeled buildings, soliciting support for projects, site selection, design, maintenance and operations of school buildings.
Prerequisite: Admission to Graduate College.
EDAD 8700 - Administration of Human Resources in Schools (3)

Many human resources functions that had previously belonged to the central office are now the responsibility of school leaders. The field of human resources administration is changing. This course serves as a guide to exemplary practices in leading a school.
Prerequisite: Admission to Graduate College.

## EDAD 8710 - Interpersonal Relationships in Educational Leadership (3)

This course deals with the establishment of quality interpersonal and group relations among adults in school settings. Candidates will develop an increased awareness of their own and others' perspectives and will develop dispositions and skills that will allow them to work more productively. This course does not meet the requirements of Nebraska law LB 250 (Multi-Cultural and Interpersonal Relations).

Prerequisite: Admission to the Graduate College and admission to the Department of Educational Administration, or admission to the Graduate College and instructor permission.

## EDAD 8720 - Multicultural and Non-Sexist Awareness

 (1)This course is designed for certificated educational employees, both teachers and administrators, seeking renewal of Nebraska certification under Nebraska LB 250 (Multi-Cultural and Interpersonal Relations).This course meets the requirements of Nebraska law LB 250 (MultiCultural and Interpersonal Relations). The purpose of the course is to develop awareness of cultural diversity in American society and to develop skills to effectively meet
the needs of students, parents, and school community members.

Prerequisite: Graduate level.

## EDAD 8800 - School Leadership Academy (3)

A leadership course designed for current and aspiring school administrators and teacher-leaders. The course content will relate administrative theory to operations of schools drawing on research, models, and various organizational structures. This course is specifically designed to bridge leadership and management theory to the practical operations of schools.

Prerequisite: Advisor's approval.
EDAD 8810 - Urban School Administration (3)
This course is designed to acquaint candidates with urban problems and issues which most significantly affect the administration of schools in and around metropolitan areas.

Prerequisite: Admission to Graduate College.
EDAD 8450 - Middle School Leadership (3)

## EDAD 9000 - Dissertation Research Design in Educational Administration (3)

The course provides doctoral candidates in Educational Administration and Supervision with a process for finalizing a dissertation research plan with a single focus and topic. The course learning activities will focus on preparing chapter three methodology of the dissertation proposal and preparing the Institutional Review Board for the Protection of Human Subjects proposal.

Prerequisite: Admittance to the UNO-UNL Joint Doctoral Program in Educational Administration; EDAD 9980; and doctoral comprehensive examinations. Must be taken concurrently with EDAD 8100.

## EDAD 9110 - Field Project in Educational Administration (1-3)

1.1 Administrative practitioners will study a current or anticipated educational problem using research techniques. Candidates will review a change process to their school or district that has recently been implemented or is under consideration for future implementation as the capstone work for the Educational Specialist degree.

Prerequisite: 1.2 Prerequisites for the course are admittance to the Ed.S. program and completion of EDAD 9200 Advanced Practicum in Ed.S. Research. Candidates are encouraged, but not required, to utilize the project from EDAD 9200 for the focus of the field project.

## EDAD 9200 - Advanced Practicum in Educational Administration (3)

This course is an independent, advanced practicum course meant to help practitioners prepare to be reflective
scholars. It builds upon theory and practice of educational leadership and provides a guided experience.

Prerequisite: Prerequisites for the course are admittance to the Ed.S. program and completion of EDAD 9200 Advanced Practicum in Ed.S. Research. Candidates are encouraged, but not required, to utilize the project from EDAD 9200 for the focus of the field project.

## EDAD 9510 - Seminar in Culture and Context of Schooling (3)

An advanced seminar designed to enhance understanding of the cultural and social forces, trends, and issues that influence the delivery and effectiveness of schooling.
Prerequisite: Admission to the Department of Educational Administration and Supervision and the UNL-UNO Joint Ed.D. Program.

## EDAD 9520 - Achieving School Excellence (3)

An advanced seminar on the pursuit of improvement in education and the role of administration in guiding positive school change through influence, persuasion, power, ethics, and research.

Prerequisite: Prerequisites for EDAD 9520 are admission to the University of Nebraska Joint Doctoral Degree program or admission to another University of Nebraska doctoral program.

## EDAD 9530 - Paradigms and Practices of Schooling (3)

This is an advanced seminar to explore leadership and supervisory practices. Particular attention will be given to organizational conceptualizations (paradigms) for addressing current educational problems and issues. Candidates will be encouraged to think outside the traditional frames of education in order to improve student achievement in PK-12 schools. When a paradigm shifts, the way we view the world and what we assume to be true dramatically changes. When faced with shifting circumstances, school leaders can turn change into opportunity and opportunity into success.

Prerequisite: Admittance to the UNO-UNL Joint Doctorate Program.
EDAD 9540 - School Law (3)
This course is concerned with laws related to schools. Topics include certification, contract, negligence, student rights, due process, curriculum, and discipline. Each topic is approached through study of most recent court cases.

Prerequisite: EDAD 8030 - Introduction to Educational Administration (previously or concurrently) or instructor permission.

## EDAD 9550 - Symposium on School Leadership (3)

The purpose of this seminar is to relate research, theory, and practice in educational organizations. The course is
designed to engage candidates with a systematic examination of school reform, best practices, and the implications for practitioners. The symposium will involve candidates with the changing roles and functions of educational leaders in rapidly changing metropolitan educational environments.

Prerequisite: Permission of instructor.

## EDAD 9610 - Applied Intermediate Statistics in Educational Administration (3)

This course is designed to develop competence in using intermediate-level statistics. Topics include descriptive and inferential statistics including measures of central tendency and variability, independent and dependent $t$-tests, correlation analysis, and regression. Emphasis is placed on the appropriateness of statistical methods relative to the type of data involved.

Prerequisite: Admission to the UNO-UNL Joint Doctoral Program in Educational Administration or instructorl\I's permission. Not open to nondegree students.

## EDAD 9620 - Applied Advanced Statistics in Educational Administration (3)

This course is designed to develop competence in using advanced-level statistics. The course includes parametric and nonparametric inferential statistics and scale development. The statistical analyses include: analyses of variance, regression analyses, factor and reliability analyses, chi-square, Mann-Whitney U, Wilcoxon SignedRanks, and Kruskal-Wallis.

Prerequisite: EDAD 9610 and must be admitted to the UNO-UNL Joint Doctoral Program in Educational Administration or instructor's permission. Not open to nondegree students.

## EDAD 9650 - Program Evaluation for Educational

 Administrators (3)This course provides an introduction to program evaluation theory and practice. It will address the range of approaches within education human service program evaluation, the standards established by the profession, the'how to' of program evaluation, and the skills needed to conduct program evaluation.

Prerequisite: Admission to the Graduate College and successful completion of TED 8010 or instructor's permission.

## EDAD 9980 - Superintendent Internship in Educaional Administration (3)

This course is a guided, field-based internship for candidates seeking the school superintendent endorsement from the Nebraska Department of Education (NDE). The internship will provide candidates with experiences in the various roles and responsibilities of a superintendent.

Prerequisite: Admittance to the UNO-UNL Joint Doctoral Program in Educational Administration or departmental permission. The internship should be taken after all other courses required for a superintendent endorsement have been completed, although it can be taken simultaneously with one of the other endorsement courses. Candidates must submit an internship application.

## EDAD 9990-Dissertation (1-12)

The course provides doctoral candidates in Educational Administration and Supervision with a process to complete a dissertation research plan. The course learning activities will focus on the completion of a candidate's dissertation. The course is designed to allow advanced doctoral candidates to demonstrate technical mastery of the discipline and to advance knowledge by completing an investigation.

Prerequisite: Admittance to the UNO-UNL Joint Doctoral Program in Educational Administration and successful completion of doctoral coursework, EDAD 9980, doctoral comprehensive examinations, EDAD 9000, and EDAD 8100.

## ELEC - Electrical Engineering

ELEC 8980 - Special Topics in Electrical Engineering IV (3)

Offered as the need arises to meet electrical engineering topics for fourth-year and graduate students not covered in other courses.

Prerequisite: Permission.

## EMEC - Engineering Mechanics

## EMEC 8616 - Special Topics in Engineering Mechanics (1-6)

Treatment of special topics in engineering mechanics by experimental, computation and/or theoretical methods. Topics will vary from semester to semester. See current schedule of classes for offerings.

Prerequisite: Permission of instructor.
EMEC 8750 - Vibration Theory and Applications (3)
Variational principles, Lagrange's Equation. Equations of motion for multi-degree of freedom systems. Free vibrations, eigenvalue problem: modal analysis. Forced vibrations: general solutions, resonance, effect of damping, and superposition. Vibrations of continuous systems: vibrations frequencies and mode shapes for bars, membranes, beams, and plates. Experimental methods and techniques.

Prerequisite: EMEC 3730 and MATH 3350/8355.

## EMEC 9160 - Theory of Plates and Shells (3)

Basic equations for the bending and stretching of thin plates with small deformations. General theory of deformation of thin shells with small deflections. Large deformations theories of plates and shells. Effect of edge conditions.

Prerequisite: EngrM 848, MATH 820 or 821.

## EMEC 9180 - Finite Element Methods in Mechanics (3)

Theory of finite elements. Displacement versus force method. Formulation of element stiffness matrices. Convergence criteria. Solution methods for large sets of equations. Application to trusses, frames, plates and shells.
Prerequisite: EngrM 848, 880, 851 or CIVE 851, or permission of instructor.

## EMEC 9226 - Theory of Elasticity I (3)

Plane stress and strain. Solution of two-dimensional problems by polynomials. Two-dimensional problems in polar coordinates. Triaxial stress and strain. Torsion of noncircular cross section. Bending of prismatical bars. Hydrodynamical analogies.

Prerequisite: EMEC 4480, MATH 3350.
EMEC 9300 - Mechanics of Composite Materials (3)
Introduction to composite materials. Properties of anisotropic lamina. Laminated composites. Failure theories. Analysis of composite structures.

Prerequisite: EMEC 4480/8486 and permission.

## EMEC 9420 - Theory of Plasticity (3)

Basic concepts of plasticity. Yield conditions and yield surfaces. Torsion of cylindrical bars and Saint VenantMises and Prandtl-Reuss theories. General theory of plane strain and shear lines. Steady and pseudo-steady plastic flow. Extremum principles. Engineering applications.
Prerequisite: EMEC 9220.

## ENGL - English

ENGL 8010 - Seminar: Literary Research (3)
A survey of the resources, methodologies, and protocol for conducting and reporting the results of research appropriate to graduate-level study in English and its related disciplines.

Prerequisite: Graduate.
ENGL 8020 - Seminar: College Writing Instruction (5)
The seminar in college writing instruction prepares Graduate Teaching Assistants to fulfill their responsibilities as teachers of first-year composition.
Prerequisite: Graduate status and a teaching assistantship.

## ENGL 8026 - American Poetry (3)

The practice and theory of American poetry from the colonial period up to the contemporary period. Formerly ENGL 4930/8936.

Prerequisite: Graduate. Crosslisted as: ENGL 4020.
ENGL 8046 - Contemporary Poetry of England and America (3)

A study of English and American poetry, the important ideas it contains, and the relevant critical theory of the contemporary period. Formerly ENGL 4910/8916.

Prerequisite: Graduate. Crosslisted as: ENGL 4040.

## ENGL 8066 - The American Novel (3)

A comprehensive survey of the evolution of the American Novel from 1789 to the present day. Special emphasis will be placed on how authors have responded to changing cultural circumstances and expressed widely varying viewpoints depending on their own gender, race, geographic region, and/or ethnicity.

Prerequisite: Graduate. Crosslisted as: ENGL 4060.
ENGL 8086 - The American Drama (3)
A study of the American drama and its theatrical background from the beginning to the present day, with concentration on the drama of the 20th century. Formerly ENGL 4980/8986.

Prerequisite: Graduate. Crosslisted as: ENGL 4080.

## ENGL 8100 - Seminar: Topics in American Literature (3)

Individual research and group discussion relating to a general topic in American literature. (The course may be repeated for additional credits under different topics.) Formerly ENGL 8060.

Prerequisite: Graduate.

## ENGL 8146 - American Literary Realism and

 Naturalism (3)This course examinesa wide range of 19th- and 20thcentury American literary works, written by male and female authors of various races, geographic regions, and ethnicities. The influence of cultural, economic, political, and social environments on the construction and reception of these works will be emphasized.

Prerequisite: For 4140: ENGL 2410 or 2420, and ENGL 2450 or 2460; For 8146: Graduate. Crosslisted as: ENGL 4140.

ENGL 8150 - Seminar: Theodore Roethke's Poetry (3)
A study of the poetry of Theodore Roethke as well as his notebooks, poetic theories, poetic practices, revisions, and
biography where appropriate to an understanding of the poetry. Formerly ENGL 8900.

Prerequisite: Graduate.

## ENGL 8160 - Seminar: Postmodern Fiction of the United States (3)

A seminar in American Fiction from the second half of the twentieth century into the twenty-first century which presents and discusses some of the major trends and issues associated with postmodern culture in America.

Prerequisite: Graduate student standing.

## ENGL 8166 - Topics in American Regionalism (3)

A study of major trends in American literary regionalism, with special emphasis on social, cultural, and ecological contexts. Focus will be determined by instructor, but may include particular authors, literary themes, historical periods, or geographic regions.

Prerequisite: Graduate. Crosslisted as: ENGL 4160.

## ENGL 8180 - Seminar: Contemporary American Poetry (3)

A study of the work of selected contemporary American poets, especially the technical aspects of the poetry. Texts usually will be a full single volume by each poet or in some cases the selected or collected works of a poet. Formerly ENGL 8920.

Prerequisite: Graduate.

## ENGL 8186 - Major Movements in Contemporary Literature (3)

A critical study of selected major literary figures or major literary movements which have appeared since World War II. Formerly ENGL 4950/8956 Contemporary Literature: Major Figures and Major Movements.

Prerequisite: Graduate. Crosslisted as: ENGL 4180.
ENGL 8200 - Seminar: Middle English Literature (3)
A study of selected writings in Middle English.
Prerequisite: Graduate and one course in Middle English language or writings.

## ENGL 8236 - Latino Literature (3)

A study of representative works of Mexican-American, Spanish-American, and American writers, along with their cultural and historical antecedents. Formerly ENGL 4180/8186 Chicano Literature and Culture.

Prerequisite: Graduate, permission. Crosslisted as: ENGL 4230.

ENGL 8250 - Seminar: Chaucer (3)
A study of selected works of Geoffrey Chaucer.

Prerequisite: Graduate and one course in Middle English language or writings.

## ENGL 8256 - Introduction to Women's Studies in Literature (3)

A critical study of literature by and about women in which students learn about contributions of women to literature, ask what literature reveals about the identity and roles of women in various contexts, and evaluate standard interpretations from the perspectives of current research and individual experience.

Prerequisite: Graduate. Crosslisted as: ENGL 4250.

## ENGL 8266 - Women of Color Writers (3)

Women of Color Writers is designed to introduce students to the multicultural, literary experience and contributions of women of color writers. The course will elucidate the multi-ethnic and feminist/womanist perspectives reflected in literary works by examining the themes, motifs and idioms used to portray women. The course examines critically the implications and conceptual grounds of literary study which have been based almost entirely on male literary experiences.

Prerequisite: Graduate English major or permission of instructor. Crosslisted as: ENGL 4260.

## ENGL 8300 - Seminar: Shakespeare (3)

Critical analysis of ten tragedies, ten histories, or ten comedies of Shakespeare. Formerly ENGL 9120.

Prerequisite: Graduate.

## ENGL 8316 - Middle English Literature (3)

A survey of the principal writings in English, excluding those of Chaucer, from 1100 to 1500 . Formerly ENGL 4320/8326.

Prerequisite: Graduate. Crosslisted as: ENGL 4310.

## ENGL 8326 - Chaucer (3)

A literary, linguistic, and historical study of the works of Geoffrey Chaucer: his dream visions, Troilus and Criseyde, and the Canterbury Tales. Formerly ENGL 4340/8346.

Prerequisite: Graduate. Crosslisted as: ENGL 4320.
ENGL 8336 - Sixteenth Century Literature (3)
Poetry and prose of the English Renaissance, from its continental origins to the end of the Elizabethan age.

Prerequisite: Graduate. Crosslisted as: ENGL 4330.

## ENGL 8346 - Shakespeare (3)

A critical study of selected plays from among the four traditional Shakespearean genres: comedy, history, tragedy, and romance. Formerly ENGL 4600/8606

Prerequisite: Graduate. Crosslisted as: ENGL 4340.

## ENGL 8356 - Shakespeare's Contemporaries (3)

A study of the development of the English drama, exclusive of Shakespeare, from the beginning to 1642. Formerly ENGL 4500/8506.

Prerequisite: Graduate. Crosslisted as: ENGL 4350.

## ENGL 8366 - Seventeenth Century Literature (3)

A study of the English poetry and prose from 1600 to 1660 including such authors as John Donne, Ben Jonson, Sir Francis Bacon, Sir Thomas Brown, and John Milton. Formerly ENGL 4480/8486.

Prerequisite: Graduate. Crosslisted as: ENGL 4360.

## ENGL 8376 - Restoration and Eighteenth Century Literature (3)

Poetry, prose (exclusive of the novel), and drama of England in the Restoration and 18th century (1660-1800), with emphasis on Swift and Johnson. Formerly ENGL 4620/8626.

Prerequisite: Graduate. Crosslisted as: ENGL 4370.
ENGL 8386 - The Eighteenth Century English Novel (3)

Readings in the English novel from Daniel DeFoe to Jane Austen. Formerly ENGL 4640/8646.

Prerequisite: Graduate. Crosslisted as: ENGL 4380.
ENGL 8400 - Seminar: English Renaissance (3)
A seminar in a few significant literary figures of the English Renaissance. Formerly ENGL 8080.

Prerequisite: Graduate.
ENGL 8416 - Literature of the Romantic Period (3)
Poetry and prose (excluding the novel) of England from 1798 to 1830 . Formerly ENGL 4810/8816.

Prerequisite: Graduate. Crosslisted as: ENGL 4410.
ENGL 8426 - Literature of the Victorian Period (3)
English poetry and prose (excluding the novel) from 1830 to 1900. Formerly ENGL 4820/8826.

Prerequisite: Graduate. Crosslisted as: ENGL 4420.
ENGL 8436 - The Nineteenth Century English Novel (3)

Readings in the English novel from Jane Austen to Thomas Hardy. Formerly: ENGL 4650/8656.

Prerequisite: Graduate. Crosslisted as: ENGL 4430.

## ENGL 8450 - Seminar: John Milton (3)

Intensive seminar in the major works of John Milton and investigation of specific critical and scholarly problems. Formerly ENGL 8140.
Prerequisite: Graduate.
ENGL 8466 - The Twentieth Century English Novel (3)
Readings in the English novel from Joseph Conrad to the present. Formerly ENGL 4660/8666.
Prerequisite: Graduate. Crosslisted as: ENGL 4460.
ENGL 8486 - Twentieth Century English Literature (3)
Readings in English literature from Shaw and Yeats to the present. Formerly ENGL 4850/8856.
Prerequisite: Graduate. Crosslisted as: ENGL 4480.

## ENGL 8500 - Seminar: Restoration and Eighteenth Century (3)

A detailed study of selected English authors and works of the Restoration and the 18th century (1660-1800).
Formerly ENGL 8090.
Prerequisite: Graduate.

## ENGL 8600 - Seminar: Nineteenth-Century English

 Literature (3)An intensive study of selected Victorian authors and their works. Formerly ENGL 8100 Seminar: Victorian Literature.

Prerequisite: Graduate.

## ENGL 8620 - Seminar: Jane Austen (3)

This seminar examines Jane Austen's oeuvre from her juvenilia to her posthumous fragments, giving particular emphasis to her six great novels, Northanger Abbey, Sense and Sensibility, Pride and Prejudice, Mansfield Park, Emma, and Persuasion. Austen biography and scholarship provide the framework for studying her literary career.

## ENGL 8626 - History of English (3)

A critical study of both the internal and external histories of English. Includes historical development of English phonology, morphology, graphics, syntax, diction, dialects, and semantics.
Prerequisite: Graduate. Crosslisted as: ENGL 4620.
ENGL 8656 - Structure of English (3)
A study of grammar as it has been conceived through history, including traditional prescriptive and descriptive approaches as well as transformational- generative grammar. Formerly ENGL 4780/8786.

Prerequisite: Graduate, ENGL 4610/8616, or permission. Crosslisted as: ENGL 4650.

## ENGL 8676 - Sociolinguistics (3)

An exploration of interconnections between language, culture, and communicative meaning, stressing interactional, situational, and social functions of language as they take place and are created within social contexts. Formerly ENGL 4880/8886.

Prerequisite: Graduate, ENGL 4610/8616 or permission. Crosslisted as: ENGL 4670.

## ENGL 8680 - Seminar: Workshop in Tom Stoppard's Plays (3)

A study of both the theory and practice of selected plays by contemporary British playwright Tom Stoppard. An informal workshop approach requiring active participation in class activities which include assembling a portfolio and presenting a reader's theater production of one play. Formerly ENGL 8000.

Prerequisite: Graduate.

## ENGL 8696 - Topics in Linguistics (3)

Studies in a selected subfield or problem area of linguistics such as sociolinguistics, generative semantics, applied linguistics, descriptive linguistics, teaching English as a foreign language, etc. Formerly ENGL 4960/8966 Studies in Linguistics.

Prerequisite: Graduate, ENGL 4610/8616, or permission of instructor. Crosslisted as: ENGL 4690.

## ENGL 8736 - Rhetoric (3)

A study of contemporary theories of invention, form, and style and their application in written discourse. Formerly ENGL 4530/8536.

Prerequisite: Graduate. Crosslisted as: ENGL 4730.
ENGL 8740 - Seminar: Discourse, Culture, and Power (3)

A graduate-level introduction to theories and methodologies of analyzing spoken and written discourse. This seminar will prepare students to conduct field research and analyze natural language data based on theoretical orientations to discourse analysis.
Prerequisite: Graduate standing.
ENGL 8756 - Composition Theory and Pedagogy (3)
Students will review and evaluate 20th century theories with an emphasis on theories developed since 1968. Students will investigate current research practices and design and execute their own research projects. Formerly ENGL 4760/8766.

Prerequisite: Graduate standing. Crosslisted as: ENGL 4750.

## ENGL 8760 - Seminar in Popular Culture, Mass Media and Visual Rhetoric (3)

This course studies how discursive meaning is made through established and emerging visual technologies and the impact visual symbol systems are having upon the field of rhetoric in general. Students will investigate how visual technologies, discourse theory, and semiotic theory has intersected with and expanded contemporary rhetorical theories, and they will apply these theories to visual texts.
Prerequisite: Graduate standing. Crosslisted as: COMM 8200.

## ENGL 8780 - Pedagogic Field Experience in TESOL (3)

A semester of observation and participation in a servicelearning and/or classroom situatiion in Teaching English to Speakers of Other Languages (TESOL). The course will emphasize the orchestration of the learning enviroment in a multicultural and global society.
Prerequisite: Graduate Standing and TED 4000/8006 FL/TESOL Methods.

## ENGL 8796 - English Career Preparation (1)

This course will prepare students for an internship or a career, addressing topics such as finding and applying for internships, workplace and industry, resume and cover letters, interviewing techniques, developing a professional portfolio, and statement of goals. Taking this course prior to an internship is highly recommended.

Prerequisite: Graduate: Graduate standing or permission of instructor Undergraduate: Junior or senior level, one 4000level English course, or permission of instructor.
Crosslisted as: ENGL 4790.

## ENGL 8800 - Seminar: Topics in English Language and Literature (3)

An intensive study of one or more authors, genres, literary movements, or literary problems not covered by regular period or genre courses. (This course may be repeated for additional credits under different topics.) Formerly ENGL 8130 Topical Seminar in English.

Prerequisite: Graduate.

## ENGL 8836 - Technical Communication (3)

Technical Communication introduces students to the field of technical communication. Students will study the development of print and electronic genres common to industry settings, the design and production of technical documents, the writing processes and work practices of professional technical communicators, and the roles of technical communicators in organizational contexts.
Prerequisite: Graduate standing or permission of instructor. Crosslisted as: ENGL 4830 and JOUR 4830 and JOUR 8836.

## ENGL 8846 - Travel Writing (3)

Travel Writing is a course in professional writing. Although the course includes critical examinations of texts, the primary focus is on the composition of various kinds of travel essays.
Prerequisite: Graduate standing. Crosslisted as: JOUR 8846 and JOUR 4840 and ENGL 4840.

## ENGL 8850 - Sem: Spiritual Nonfiction (3)

Spiritual Nonfiction is a creative nonfiction writing seminar where students study and practice various forms and styles of spiritual nonfiction. The comparative study of spirituality and religion is not the focus of this course. Writing is the focus. Discussion of the characteristics of spiritual experiences and ideas will be limited to their formalistic treatment within individual works.

Prerequisite: Graduate Standing. At least one creative nonfiction writing course at 4000/8000 level.

## ENGL 8856 - Information Design for Technical Communicators (3)

This course introduces students to strategies for integrating visual and textual elements of technical documents. Instruction will focus on design theory and application through individual and collaborative projects. Students will develop the professional judgment necessary for making and implementing stylistic choices appropriate for communicating technical information to a lay audience.

Prerequisite: Graduate standing or permission of instructor. Crosslisted as: ENGL 4850 and JOUR 4850 and JOUR 8856.

## ENGL 8866 - The Modern Familiar Essay (3)

A study of the modern familiar essay, with an emphasis on writing the informal essay. Formerly ENGL 4700/8706.

Prerequisite: Graduate. Crosslisted as: ENGL 4860.

## ENGL 8870 - Seminar: Publishing Non-Fiction (3)

A seminar in the process leading to publication of essays in one or more of the following genres: scholarly essay, personal essay, travel essay, pedagogical essay, autobiographical essay.
Prerequisite: Graduate standing and 6 hours of graduate credit.

## ENGL 8880 - Advanced Placement Institute: English \& Compositions (3)

An intensive workshop devoted to the organization, planning, implementation and improvement of advanced placement courses in literature and composition. Intended for secondary school teachers of English who are presently teaching or are planning to propose and/or teach advanced placement courses in their school.

Prerequisite: Graduate in English or in English education.

## ENGL 8886 - Community Service Writing (3)

A study of the relationship between texts and the social contexts in which they function, with particular attention to differences between academic and non-academic discourse communities. This is a service-learning course: students work as volunteers at community organizations.

Prerequisite: Graduate standing. Crosslisted as: ENGL 4880.

ENGL 8890 - Sem: Experiments in Creative Nonfiction (3)

English 8890 is a graduate seminar in creative nonfiction. This course explores, through an intensive engagement with long and short forms of creative nonfiction, the ways in which contemporary practitioners of the genre have experimented with form and meaning. Students will attempt their own experiments in writing.
Prerequisite: Graduate Standing, Two graduate-level creative nonfiction courses from ENGL-8846, ENGL8866, ENGL-8870, or ENGL-8800, when topic is appropriate.

## ENGL 8896 - Capstone Course in Technical Communication (3)

In this capstone course, students will extend foundational skills learned in previous technical communication courses. Students will demonstrate their competency of the technical documentation process in organizational environments, the issues important to the technical communication profession, and the practices of writing and creating complex technical documents for specific purpose and audience.

Prerequisite: Graduate standing or permission of instructor. ENGL 8816, 8836, 8856 and 8876 highly recommended. Crosslisted as: ENGL 4890 and JOUR 4890 and JOUR 8896.

## ENGL 8900 - Independent Study (1-3)

Specially planned readings in a well-defined field of literature or language, carried out under the supervision of a member of the graduate faculty. Designed primarily for the student who has need of work not currently available in the departmental offering and who has demonstrated capability of working independently. May be repeated for credit once. Formerly ENGL 8980.

Prerequisite: Graduate, permission of instructor, admission to candidacy, and no 'incompletes' outstanding.

ENGL 8910 - Seminar: Critical Theory (3)
Seminar in theories of literary criticism, with emphasis on modern approaches. Formerly ENGL 8040.

Prerequisite: Graduate.

## ENGL 8946 - History of Literary Criticism (3)

Primarily a study of the history of English, American, and continental literary criticism, with emphasis on modern theory and methods. Formerly ENG 4040/8046.
Prerequisite: Graduate or permission. Crosslisted as: ENGL 4940.

## ENGL 8966 - Topics in Language and Literature (3)

Specific subjects (when offered) appear in class schedules. Complete syllabus available in English Department. Formerly ENGL 4940/8946 Studies in Language and Literature.

Prerequisite: Graduate. Crosslisted as: ENGL 4960.

## ENGL 8990-Thesis (3-6)

Independent research project written under the supervision of an adviser.

Prerequisite: Graduate, permission of thesis director.
ENGL 8473-(3)
ENGL 9120-(3)
ENGL 9210 - (3)

## ENVE - Environmental Engineering

## ENVE 8980 - Special Problems in Environmental Engineering (1-6)

Special research-oriented problems in current topics in environmental engineering.
Prerequisite: Permission.

## ENVE 8990 - Master's Thesis (6-10)

Master's thesis work

## ENVE 9900 - Seminar in Environmental Engineering (1)

Presentation and discussion of current research topics and projects in environmental engineering and closely allied areas.

Prerequisite: Permission.

## ENVE 9980 - Special Topics in Environmental Engineering (1-6)

Independent library and/or experimental research, analysis, evaluation and presentation of current and advanced topics in environmental engineering and closely related areas.

Prerequisite: Permission.

## FINA - Fine Arts

## FINA 8010 - The Arts and the Executive (3)

The course will provide the graduate student with an understanding of the organizational and managerial issues involved in an arts organization and the role of the arts in the business community.

Prerequisite: Graduate admission and permission of instructor. Crosslisted as: BSAD 8880.

## FLNG Foreign Language Literature

## FLNG 8020 - Seminar: FL/TESOL Research (3)

A survey of Second Language Acquisition theory and methodology culminating in a student-designed, classroom-based research project.
Prerequisite: Admission to the Graduate College.
FLNG 8030 - Seminar: Second Language Acquisition Theory (3)

An advanced introduction to second language acquisition theories based in neurolinguistics, psycholinguistics, and sociolinguistics. Students will explore various schools of thought about how people learn languages other than their language(s) of nurture; this includes languages that are acquired by adolescents and adults, both inside and outside the classroom.

Prerequisite: Graduate standing and ENGL 4610/8616 or equivalent.

## FLNG 8040 - Seminar: Assessment \& Curriculum Design (3)

This course will familiarize (future) language educators with current trends in the assessment of language skills as well as expose them to the design, implementation, and evaluation of second language curricula.
Prerequisite: Admission to the Graduate College.

## FLNG 8900 - Directed Readings (3)

Special directed readings arranged individually with students on topics not explored in other graduate offerings.
Prerequisite: Permission of instructor and/or at least twelve graduate hours completed.

## FLNG 8960 - Seminar: Special Topics (3)

This course provides a format for the exploration of topics of interest to advanced foreign language/TESOL students.

Prerequisite: Admission to the Graduate College.

## FMCS Family Consumer Sciences

FMCS 8166 - Educational Programming (3)
Planning and implementing developmentally appropriate educational experiences for a variety of audiences in nonformal settings. Not open to HRFS education majors in teacher certification tracks.

Prerequisite: Junior standing or permission of the instructor. Crosslisted as: FMCS 4160.

FMCS 8386 - Problems in Family Resources (1-3)
Readings, obsesrvations, projects and discussion on current issues in family resources.
Prerequisite: Permission of instructor.
FMCS 8466 - Addictions and Violence in the Families (3)

An overview of addictions and violence across the life cycle. Includes theories, behavioral patterns, and physiological and psychological impacts on individuals and the family and implications for intervention.

Crosslisted as: FMCS 4460.
FMCS 8836 - Problems in Family Resources (1-3)
Readings, observations, projects and discussion on current issues in family resources.

Prerequisite: Permission of instructor.

## FMCS 8886 - Child and Family Policy (3)

A detailed analysis of child and family policies, including what is family policy, how policy is made and implemented, how values and goals affect policy and future directions for child and family policies in America and other countries.

Prerequisite: 12 hrs course work in FMCS and/or social sciences. Crosslisted as: FMCS 4880.

FMCS 8926 - Contemporary Family Issues (1-3)
Current family related issues such as cross cultural families, work and family, addictions in families, gender and family. Topics vary.

Prerequisite: HRFS 1830, FMCS 1600 and 2800 or permission of instructor.

FMCS 8936 - Special Topics in Contemporary Family Issues (1-3)

Current family related issues such as kebt management, gender and family, low income families, retirement planning, work and family, mothering, fathering, housing. Topics vary.

Crosslisted as: FMCS 4930.

## FMCS 8956 - Special Topics in Family and Cultural

 Diversity (3)Focused investigation of current topics related to diverse populations, e.g., religion, sexual orientation, ethnicity.
Crosslisted as: FMCS 4950.
FMCS 8966 - Independent Study (1-5)
Individual projects in research, literature review, or creative production may or may not be an extension of course work. The work will be supervised and evaluated by departmental faculty members.

Prerequisite: 12 hours course work in FMCS and or social sciences.

FMCS 8976 - Community Internships in Family \& Consumer Science (3-6)

Applied fieldwork in agencies serving children, youth, families and communities.

Prerequisite: 12 hours in FMCS or other social sciences and Junior standing. Crosslisted as: FMCS 4970.

FMCS 8980 - Research Experiences in Family and Consumer Sciences (1-5)

Participation in an ongoing research project in Child Development Studies/Early Childhood Education, Family Science, Marriage and Family Therapy, Family Financial Management, or Family and Consumer Sciences Education.

Prerequisite: 18 hours in FMCS and/or social sciences. Permission/contract with individual faculty.

FMCS 8990 - Masters Thesis (6-10)

FMCS 9960-Research Other Than Thesis (1-6)

Prerequisite: Graduate and permission of instructor.

## FREN - French

FREN 8036 - Advanced French Conversation (3)
Oral practice employing complex and sophisticated conversational structures in formal speeches and discussions of readings.
Prerequisite: Graduate standing or departmental permission. Crosslisted as: FREN 4030.

FREN 8046 - Advanced French Composition and Stylistics (3)
Advanced grammatical principles, composition, and sylistics.

Prerequisite: FREN 3040 or departmental permission, and English 1160. Crosslisted as: FREN 4040.

FREN 8056 - Seminar in the Culture and Civilization of Quebec (3-6)

Resident study in Quebec City, Quebec, with emphasis on total immersion in the language, homestays, intensive classroom instruction and cultural activities. Summer, 5week term, 5 hours daily. Prerq: FREN 2120 or departmental permission.
Crosslisted as: FREN 4050.

## FREN 8156 - Contemporary French Novel (3)

Selected contemporary French novels are analyzed and discussed.

Prerequisite: FREN 3150 and 3160, or departmental permission. Crosslisted as: FREN 4150.

FREN 8176 - Contemporary French Theater (3)
Selected contemporary French plays are analyzed and discussed.

Prerequisite: FREN 3150 and 3160, or departmental permission.

FREN 8226 - The Structure of French (3)
A survey of the linguistic structure of modern French, including phonology, morphology, and syntax.

Prerequisite: FREN 3040 and 4610. Crosslisted as: FREN 4220.

## FREN 8440 - Seminar: French Composition (3)

This course provides opportunities for students to refine their composition skills in French through extensive writing workshops and peer editing. Computer applications to composition will be employed.

Prerequisite: Admission to the Graduate College.
FREN 8866 - Modern French Women Authors (3)
A comparative treatment of works by women in contemporary and recent French literature; the 'feminine' perspective on society, politics and human values as expressed in those works.

Prerequisite: French 3150 or 3160, or departmental permission. Crosslisted as: FREN 4860.

FREN 8900 - French Independent Study-Graduate Only (1-3)

Specifically planned projects and readings in a welldefined field of French literature or linguistics carried out under the supervision of a member of the foreign languages faculty holding graduate faculty status.

Prerequisite: Acceptance into the Master of Arts in Language Teaching Program (MALT). Must have completed a minimum of six graduate credit hours.

## FREN 8906 - Independent Study (1-3)

Specially planned readings in a well-defined field of literature, carried out under the supervision of a member of the foreign language faculty. Designed primarily for the student who has need of work not currently available in the departmental offerings and who has demonstrated capability of working independently. May be repeated for credit once.

Prerequisite: Permission of the instructor, junior or senior standing, and no 'incompletes' outstanding. Crosslisted as: FREN 4900.

## FREN 8000 - Any 8000-level Literature course (3)

FREN 8960 - Study Abroad (3)

## GEOG - Geography

## GEOG 8000 - History and Philosophy of Geography (3)

Introduction to history of geography. Emphasis on significant ideas, concepts, methodologies and philosophies in geography from classical Greeks to present.

Prerequisite: Permission.
GEOG 8016 - Conservation of Natural Resources (3)
A study of conservation techniques and problems with particular emphasis on the United States. Includes philosophical and economic aspects of resource management and a systematic survey of traditional conservation types including soils, forestry, water resources and energy.

Prerequisite: Three hours of geography. Crosslisted as: GEOG 4010.

## GEOG 8026 - Quantitative Analysis in Geography (3)

An introduction to multivariate statistical analysis and spatial statistics. Emphasis will be placed on the nature of geographic data, sampling theory and design, descriptive and spatial statistics, inferential statistics, correlation and regression analysis. Students will receive hands-on experience working with statistical data sets, software and scientific visualization numerical results.

Prerequisite: MATH 1530 or permission. Crosslisted as: GEOG 4020.

## GEOG 8036 - Computer Mapping and Visualization (3)

Computer techniques in the mapping and visualization of spatial data. Various forms of spatial data manipulation and computer graphic output techniques are examined. Particular attention is given to the incorporation of
interaction and animation in the display of maps as well as the creation of maps for distribution through the internet.

Prerequisite: GEOG 3530 and GEOG 3540. Crosslisted as: GEOG 4030.

## GEOG 8040 - Seminar in Educational Geography (3)

A survey of methods, instruction aids and goals for teaching geography. Designed to aid the teacher in the improvement of geographic instruction in elementary and secondary schools as well as in higher education.

Prerequisite: Permission.

## GEOG 8046 - Geoarchaeology (3)

The study of archaeology with the use of geological and geographical methodology.

Prerequisite: Major in geology or geograpy; or major in Anthropology, Philosophy, or Religion with GEOG 1030, 1060 or 1070; or GEOL 1170 or 1010; or permission. Crosslisted as: GEOG 4040 and GEOL 4040.

## GEOG 8056 - Geographic Information Systems I (4)

An introduction to the concepts and principles and geographic information systems (GIS). Emphasis will be placed on geographic data inputs, manipulation, analysis, and output functions. Exercises introduce students to GIS software and applications.

Prerequisite: GEOG 3530 and GEOG 3540 or 6 hours in Geography. Crosslisted as: GEOG 4050.

## GEOG 8126 - Urban Geography (3)

A geography of the city from the viewpoint of history, site and situation, external relations, internal relations, and the comparative study of cities.
Crosslisted as: GEOG 4120.

## GEOG 8130 - Seminar in Economic Geography (3)

A seminar course which investigates the development of current world economic systems through the elements of primary, secondary, tertiary, quarternary and quinary production on a micro and macro scale. Exchange and transactional systems, consumption linkages, resource management, economic health on global and local scales, and location decision-making are major topics.

Prerequisite: Graduate in geography and permission of instructor.

## GEOG 8146 - Urban Sociology (3)

Examines urban theoretical perspectives, urbanization processes, the diversity of metropolitan communities, urban stratification, metropolitan growth, urban neighborhoods, community power and urban policy and planning.
Prerequisite: Permission. Crosslisted as: GEOG 4140.

## GEOG 8156 - Geography, Gender and Work (3)

This is an advanced undergraduate and graduate level seminar which focuses on the linkages among geography, gender and work. The course considers theoretical and methodological issues in addition to empirical perspectives. We begin by considering the nature of space, of gender, and of work, and progress through topics including the gendering of work and the geography of occupational segregation. Emphasis is placed on discussion, critical reading, and writing skills.

Prerequisite: Graduate standing in a social science discipline, or permission of the instructor. Crosslisted as:
WGST 8156 and WGST 4150 and GEOG 4150.

## GEOG 8166 - The American Urban Landscape (3)

Investigation of the morphological and architectural character of the American city as a cultural form. Emphasis is placed on the evolution of urban form and land use patterns and on the development of structures that comprise the building fabric of the cityscape.

Prerequisite: Graduate. Crosslisted as: GEOG 4160.

## GEOG 8176 - Advanced Cultural Geography (3)

This course examines current theoretical debate and research practice in a select topic in Cultural Geography. Emphasis will be on readings and discussion with students engaging in original research. Specific thematic focus will vary from year to year. This course may be taken multiple times as long as topics differ.

Prerequisite: Undergraduate: GEOG 1000 or 1020, junior standing, or permission of the instructor. Graduate: Graduate standing and permission of the instructor. Crosslisted as: GEOG 4170.

## GEOG 8210 - Seminar in Cultural Geography (3)

The philosophy of cultural and historical geography with emphasis on describing and interpreting the cultural landscape.

Prerequisite: Permission.

## GEOG 8236 - Great Plains and Nebraska (3)

A study of the major physical and cultural attributes of the region. Emphasizes settlement history and the role of agriculture on the regional economy.

Crosslisted as: GEOG 4230.
GEOG 8256 - Theory and Structural Geomorphology (3)

Primarily a lecture course with emphasis on the historical development of theories in evolution of earth surface features and processes, coupled with underlying structural controls of landforms.

Prerequisite: GEOG 1070 or GEOL 1170. Crosslisted as: GEOG 4250.

## GEOG 8266 - Process Geomorphology (3)

Primarily a lecture and laboratory course. Emphasis on methodology and modern process-oriented geomorphology.

Prerequisite: GEOG 1070 or GEOL 1170. Crosslisted as: GEOG 4260.

GEOG 8310 - Geography of Agriculture (3)
A systematic study of the characteristics and patterns of world agriculture.

Prerequisite: Permission.
GEOG 8326-Climatology (3)
A study of climatic processes and their effect on shaping the physical landscape. Emphasis on physical and applied aspects of the field.

Prerequisite: GEOG 1030, 1060 or 3510 . Crosslisted as: GEOG 4320.

## GEOG 8336 - Soil Genesis, Morphology and Classification (3)

This course is designed to familiarize students with soil genesis, morphology and classification. The course focuses on relationships between soils and environmental factors, especially climate and vegetation. Soil-landform relationships also are examined.
Prerequisite: GEOG 1030 or 1070 or GEOL 1170, junior or permission of instructor. Crosslisted as: GEOG 4330.

## GEOG 8346 - Water Resources (3)

A study of the applied principles of hydrology, water systems modeling, river basin development, and water management issues and practices in the United States and other parts of the world. Two local Saturday field trips will be required.

Prerequisite: Six hours of Physical Geography or equivalent and graduate standing. Crosslisted as: GEOG 4340.

## GEOG 8500 - Special Topics in Geography (1-3)

This course will provide for an in-depth study of a geographical or geological subject (as specified in the course subtitle). Subjects will be offered as sections of GEOG 8500, but will be separate from one another. Students may repeat GEOG 8500 as often as they like as long as no specific subject is duplicated. Course to be offered with approval of Graduate Program Committee and Dean for Graduate Studies.

Prerequisite: Variable.

## GEOG 8510 - Advanced Geomorphology (3)

A seminar and lecture course on the current concepts and literature in the field of landform studies. Discussion will emphasize classic ideas as well as the modern concepts of climatic, dynamic and quantitative geomorphology. Some study of Quaternary chronology will be necessary. Several optional Saturday field trips.

Prerequisite: GEOG 8256 or 8266 and GEOL 1170 or GEOG 1070. Permission.

## GEOG 8535 - Cartography \& GIS (2)

An introduction to the concepts and techniques of map construction and computer-based geographic information systems. Topics include map scale, map projections, thematic cartography, history of cartography, computer mapping, and global positioning systems. Particular attention is given to the processing and presentation of spatial data by the computer and the distribution of maps through the Internet.

Prerequisite: GEOG1000 or 1020, GEOG1060 or 1070, and a course in statistics. Crosslisted as: GEOG 3530.

GEOG 8536 - Historical Geography of the United States (3)

An analysis of historical circumstances behind contemporary patterns of American cultural geography.

Prerequisite: Graduate and HIST 1110 and 1120 or GEOG 1020 or 3330 . Crosslisted as: GEOG 4530.

## GEOG 8545 - Cartography \& GIS Lab (2)

An introduction to the methods and techniques of map construction using both graphic design and geographic information system software. Topics include map design for both general reference and thematic maps. Particular attention is given to the processing, compilation, data classification, and symbolization of various types of spatial data. This course is the lab component of GEOG 8535.
Prerequisite: Concurrent or previous registration in GEOG 8535.

## GEOG 8580 - Soils (3)

An examination of the older geographical concepts of the distribution and morphology of soil and the new works concerned with soil forms on a regional, rather than zonal, basis.

Prerequisite: GEOG 1060 or 1070 and permission.
GEOG 8600 - Independent Research (1-3)
Advanced study in the form of a major research project. Students are required to submit a written proposal and gain written approval of the supervising faculty member and Graduate Program Committee. In addition to a formal written report, the student is required to make an oral
presentation of research results to General Seminar or a professional meeting.

Prerequisite: Fifteen graduate hours in geography and permission.

## GEOG 8636 - Environmental Remote Sensing (4)

An introduction to remote sensing science and technology. Emphasis will be placed on multispectral data, matter/energy interactions, sensor system characteristics, photogrammetry, image interpretation, digital image processing and environmental applications. Formal laboratory instruction will provide students with problemsolving skills and hands-on experience with remote sensing and GIS software.

Prerequisite: GEOG 1060 or 1070 or GEOL 1170. Introductory statistics highly recommended. Crosslisted as: GEOG 4630.
GEOG 8640 - Remote Sensing: Advanced Concepts and Applications (3)
Designed for the graduate student desiring to do advanced work in remote sensing. The emphasis of the course is on non-photographic sensors and especially digital processing of multispectral satellite data. The applications are multidisciplinary in nature.

Prerequisite: GEOG 4630/8636.

## GEOG 8650 - Land Use (3)

A field course designed to understand, by actual field investigation, land use patterns in urban areas through the comprehension of social, physical and economic factors which tend to shape the land use of a given place. The major emphasis will be placed upon field investigations in the urban area, with the functional region receiving the major consideration.

Prerequisite: GEOG 4120/8126.

## GEOG 8666 - Geographic Information Systems II (4)

An introduction to advanced geographic information systems (GIS) topics. Emphasis will be placed on algorithms and analysis for information extraction. Topics include spatial interpolation, remote sensing GIS integration, software development, spatial analysis, GIS modeling, and future advances in GIS. Formal laboratory instruction will provide students with GIS experience to solve application problems.
Prerequisite: GEOG 4050/8056. Crosslisted as: GEOG 4660.

## GEOG 8670 - Cartographic Methods (3)

Teaches effective map layout and the latest cartographic techniques, leading to a high level of competence in the design and interpretation of maps.

## GEOG 8700 - Research Methods (3)

A course designed to provide students with an overview of the discipline of geography with two purposes in mind: (1) a graduate-level introduction to the chief issues and concepts on the research frontiers of geography; and (2) preparation by the graduate students to begin their own thesis research.

## GEOG 8800 - Internship in Environmental/Regional

 Planning (1-6)(repeatable up to six hours) Internship with local planning agencies enabling students to gain knowledge and experience in comprehensive regional or environmental planning.
Prerequisite: Permission and 12 graduate hours in geography.

## GEOG 8810 - Seminar in Metropolitan Planning (3)

An overview of metropolitan planning with special emphasis on the planning process and current problems encountered by planning officials.

Prerequisite: Permission.

## GEOG 8826 - Introduction to Environmental Law and

 Regulations (3)Seminar on environmental law and regulation. The course will address federal regulations, implementing instructions, legal principles, and requirements. The major federal environmental laws, air and water quality, solid and hazardous waste, and pollution prevention and remediation will be discussed.

Prerequisite: Junior and permission. Crosslisted as: PA 8826 and PA 4820 and GEOG 4820 and BIOL 4820 and BIOL 8826 and ENVN 4820.

GEOG 8830 - Interdisciplinary Seminar on the Urban Community (2-6)

An interdisciplinary course on the metropolitan community in which various departmental and college offerings concerned with urban problems are put in broad interrelated focus.

Prerequisite: Undergraduate major in one of the social sciences plus six hours of graduate work in one of the social sciences. Crosslisted as: UBNS 8940 and UBNS 8000.

GEOG 8840 - Interdisciplinary Seminar on the Urban Community (2-6)
An interdisciplinary course on the metropolitan community in which various departmental and college offerings concerned with urban problems are put in broad interrelated focus.

Prerequisite: Undergraduate major in one of the social sciences plus six hours of graduate work in one of the social sciences. Crosslisted as: UBNS 8940.

## GEOG 8850 - GIScience Practicum (3)

This course is designed to provide students with geographic information system (GIS) application experience. Emphasis will be placed on advanced topics and GIS technology. Students will integrate scientific theory, GIS technology and application knowledge. Student internships or independent projects will provide students with practical software system expertise and GIS industry experience.
Prerequisite: GEOG 8026, 8036, 8056, 8636, 8666, or consent of professor.

GEOG 8906 - Urbanization in Developing Areas (3)
The functions and morphology of various types of cities found in presently developing areas of the world. Emphasis will be upon contrasting the cities of the developed and developing areas.

Prerequisite: Six hours of geography and GEOG 8126. Crosslisted as: GEOG 4900.

GEOG 8990 - Thesis (1-6)
Independent research project written under the supervision of an adviser.

GEOG 8120 - Urban Geography (3)
GEOG 9550 - Topics in Geomorphology and The Quaternary (3)

A seminar on the landforms of a particular area from the perspective of a particular geomorphic process operating through Quaternary time. Writing of research grant proposals emphasized as well.

Prerequisite: Permission.

## GERM - German

## GERM 8000 - Any 8000-level Literature course (3)

GERM 8036 - Advanced German Conversation (3)
Oral practice employing complex and sophisticated conversational structures in formal speeches and discussions of readings.

Prerequisite: GERM 3030 or departmental permission. Crosslisted as: GERM 4030.

GERM 8046 - Advanced German Composition and Stylistics (3)

Advanced grammatical principles, composition and stylistics.

Prerequisite: GERM 3040 or departmental permission, and ENGL 1160. Crosslisted as: GERM 4040.

GERM 8226 - The Structure of German (3)
A survey of the linguistic structure of modern German, including phonology, morphology, and syntax.

Prerequisite: GERM 3040 and 4610, or permission. Crosslisted as: GERM 4220.

## GERM 8316 - German Literature of the 19th Century

 (3)Survey of the literature of the nineteenth century from romanticism to naturalism.

Prerequisite: GERM 3150 or departmental permission. Crosslisted as: GERM 4310.

## GERM 8326 - German Literature of the 20th Century

 (3)Survey of literature of the twentieth century from expressionism post-World War II.
Prerequisite: GERM 3150 or departmental permission. Crosslisted as: GERM 4320.

## GERM 8386 - German Civilization from the 18th

 Century to the Present (3)Detailed analysis of German art, architecture, literature, music and philosophy. The influence of the sciences and of technology upon modern German civilization and culture.

Prerequisite: GERM 3370 or departmental permission. Crosslisted as: GERM 4380.

## GERM 8406 - German Novelle (3)

Survey of the German short story, its historical origin, and characteristics.

Prerequisite: GERM 3150 or departmental permission. Crosslisted as: GERM 4400.

GERM 8440 - Seminar: German Composition (3)
This course will provide opportunities for students to refine their composition skills in German through extensive writing practice, writing workshops, and peer editing. Computer applications to composition will be employed.

Prerequisite: Admission to Graduate College.
GERM 8446 - German Drama (3)
History of drama development, study of several of the more important dramas.

Prerequisite: GERM 3150 or departmental permission. Crosslisted as: GERM 4440.

GERM 8506 - German Literature of the 18th Century (3)

A study of representative authors from the Enlightenment, storm and stress, and German classicism: Lessing, Herder, Schiller, and Goethe.

Prerequisite: GERM 3150 or departmental permission. Crosslisted as: GERM 4500.

## GERM 8906 - Independent Study (1-3)

Specially planned readings in a well-defined field of literature, carried out under the supervision of a member of the foreign language faculty. Designed primarily for the student who has need of work not currently available in the departmental offerings and who has demonstrated capability of working independently. May be repeated for credit once.

Prerequisite: Permission of the instructor, junior or senior standing, and no incompletes outstanding. Crosslisted as: GERM 4900.

## GERM 8966 - Pro-seminar (1-3)

A detailed study of narrower phases of literature, language or culture.

Prerequisite: Departmental permission. Crosslisted as:
GERM 4960.
GERM 8960 - Study Abroad (3)

## GERO - Gerontology

GERO 8106 - Educational Gerontology (3)
An introduction to the field of education for and about the aging. The institutions and processes of education will be analyzed to determine their relationships and value to persons who are now old and those who are aging.

Crosslisted as: GERO 4100.
GERO 8280 - Counseling Older Adults and Their Families (2)

A study of issues related to the counseling of older adults and their families.

## GERO 8356 - Issues in Aging (3)

This course is intended for students in gerontology and in other fields who are interested in a humanistic approach to understanding significant issues which affect the lives of older people.

Prerequisite: Graduate. Crosslisted as: GERO 4350.
GERO 8476 - Mental Health and Aging (3)
The goal of this courses is to survey the mental health needs of older adults. Consideration is given to identifying both positive mental health and pathological conditions.

Treatment interventions effective with older adults and their families are also discussed.

Crosslisted as: GERO 4470 and PSYC 4470 and PSYC 8476.

## GERO 8486 - Comparative Gerontology (3)

The study of aging around the world by a comparative method in a cross- cultural and cross-national framework. An explanation of some practical experiences and developments in Europe, Asia and Africa will be examined.

Crosslisted as: GERO 4480.

## GERO 8506 - Legal Aspects of Aging (3)

Consideration of the legal concerns which are likely to arise as people age. Includes introduction to American legal system, and emphasis on underlying legal concepts and issues of special importance to older persons.
Crosslisted as: GERO 4500.

## GERO 8516 - Long-Term Care Administration (3)

An investigation of the broad range of policy issues, theoretical concerns and practical management strategies influencing the design, organization and delivery of longterm care services.

Crosslisted as: GERO 4510 and PA 4510 and PA 8516.

## GERO 8556 - Health Aspects of Aging (3)

This course emphasizes health promotion for older adults. Special health needs of older Americans are compared and contrasted with health needs for other age groups. Prevention or delaying of chronic diseases and disorders are emphasized.
Prerequisite: For 8556: Graduate. For 4550: six hours of health or permission of instructor. Crosslisted as: GERO 4550 and HED 4550 and WGST 4550 and HED 8556.

GERO 8596 - Disorders of Communication in Older Adults (3)

This course is designed to familiarize the student with the identification and symptomatology, basic assessment and intervention strategies associated with disorders of communication affecting older adults and geriatric patients. It is beneficial to students majoring in gerontology or speech pathology, as an elective course, or as a professional enrichment course for persons working in these or related fields. Graduate: Students are assigned contacts with and written reports of contacts with an older adult who manifests a disorder of communication.

Crosslisted as: GERO 4590.

GERO 8676 - Programs and Services for the Elderly (3)
This course is provided to give the student a historical overview of programs for the elderly; examine the national policy process as it relates to the older American; and review the principles and practices relative to the existing national programs for the aged.

Crosslisted as: GERO 4670.

## GERO 8726 - Baby Boomers and the 21st Century (3)

Marketing decisions and strategies apply to all businesses and are influenced by the target market. The economic realities and the character of America will change due to shifting demographics of baby boomers. Businesses that understand the power of the baby boomers will succeed; failure to understand that power may lead to economic consequences. Students from many disciplines will benefit from this cross-referenced course blending the realities of gerontology with the predictions of baby boomer behavior and the resulting impact to all businesses.

Prerequisite: Junior, Senior and Graduate Level Standing. Crosslisted as: GERO 4720.

## GERO 8730 - Dying, Death \& Grieving (3)

An examination of theory and research relevant to interaction with the older, terminally ill person, focusing on communication with widows and other survivors as well as the dying patient.
Crosslisted as: HED 8730.

## GERO 8756 - Mid-life, Career Change, Preretirement Planning (3)

This course is designed to involve candidates in the exploration of the developmental tasks of mid-life, myths and realities related to career change as well as the implication of preretirement planning. Factual information, as well as model examination and evaluation are presented to aid the candidate in becoming better equipped to understand some of the forces which affect the well-being of middle aged persons as they prepare for the later years.

Prerequisite: Junior, permission of instructor. Crosslisted as: GERO 4750 and COUN 8756.

## GERO 8920 - Special Studies in Gerontology (1-3)

Special studies designed around the interests and needs of the individual student in such areas as the psychology, sociology, economics or politics of aging, as well as operation of various service systems. The studies may be either a literature review project or a field project in which experience is gained in the community identifying and analyzing needs and services related to older people.
Prerequisite: Six hours of gerontology or permission.

## GERO 8960 - Directed Readings in Counseling and Gerontology (1-3)

A study of recent and current literature on counseling with older people.

Prerequisite: GERO 8986 or COUN 8986, counseling major, or permission.

## GERO 8970 - Personal Values and Aging (1)

Course designed to increase students' self-awareness of personal values and feelings related to aging and the aged.
GERO 8986 - Counseling Skills in Gerontology (3)
This course is intended to help develop basic counseling skills for application in gerontology.
Crosslisted as: GERO 4980 and COUN 8986.
GERO 8990 - Thesis (1-6)
Independent research project required of all students working toward the Master of Arts degree. The thesis is written under the supervision of the thesis adviser and the thesis committee.

Prerequisite: Permission from adviser.

## GERO 9020 - Graduate Seminar in Statistical

 Applications (3)Provides an introduction to statistical methods and data management used in the social, behavioral and health sciences.

Prerequisite: None.

## GERO 9110 - Applied Social Gerontology (3)

An overview of social gerontology with an emphasis on the interplay between social, psychological and physical elements in later life. Restricted to graduate students only; required of gerontology students.
Prerequisite: Graduate. Crosslisted as: SOC 9110.
GERO 9460 - Seminar in Aging and Human Behavior (3)

This course will examine in detail age-related changes in psychological processes and explore the implications of these changes for behavior. The course is intended primarily for graduate students in psychology and gerontology.
Crosslisted as: PSYC 9460.

## GERO 9480 - Geropsychology (3)

To become familiar with the psychology of aging from a research perspective. The focus will be on psychological research in the middle years and in later years.

Crosslisted as: PSYC 9480.

## GERO 9560 - Seminar: The Older Woman (3)

This course is designed to provide students with a critical understanding of older women. Primary focus will be directed towards an exploration of lifestyles, needs and interests of women in the later half of life. Reading and discussion of current literature will provide a basis for continued exploration through the preparation, administration and analysis of a group research project.

## GERO 9990-Dissertation (1-6)

This course provides doctoral students pursuing the PhD in Human Sciences with a specialization in gerontology to complete a dissertation research plan. The course learning activities will focus on the completion of an approved dissertation.

Prerequisite: Admittance to the PhD in Human Sciences with a specialization in gerontology.

## HED - Health Education

HED 8050 - Applied Research in Public Health (3)
This course will assist candidates to develop the basic skills to conduct applied research to address contemporary problems in public health. The course will emphasize proposal writing, data collection, research design, statistical analysis, computer application, and writing of research reports.
Prerequisite: Graduate standing.

## HED 8080 - Topics in Health Education (3)

This course will explore important current issues in Health Education. Candidates will explore economic, political, ethical and technological developments that affect the practice of Health Education. There is no limit to the number of times a candidate may enroll in HED 8080 as long as a different topic is offered each time.
Prerequisite: Graduate.

## HED 8136 - Community Health (3)

A survey course of community health issues. The basics of epidemiology statistical sciences, environmental health, managerial administrative sciences, and behavioral social sciences for community health are examined. Health education candidates will gain skills needed to orchestrate a learning environment conductive to developing and managing community health programs.

Prerequisite: None. Crosslisted as: HED 4130.

## HED 8160 - Alcohol \& Drug Prevention Education in Schools \& Communities (3)

This course will focus on a team approach to address alcohol and other drug education, prevention, referral techniques and counseling strategies through the cooperation of school staff and community representatives
who work with children from pre-school through 12th grade. Topics will include etiology of alcohol and other drug problems, current factual information concerning alcohol and other drugs, strategies for instruction, gaining parental and community support, developing youth leadership for prevention, intervention techniques for school youth, multicultural factors in prevention education, alternatives to drug use, referral and support resources, and the development of mini-networks for dissemination of information within the school and community.

Prerequisite: Graduate. Crosslisted as: COUN 8160.

## HED 8250 - Human Sexuality (3)

This graduate-level course is aimed at providing an overview of the current scientific knowledge concerning human sexuality. The course is designed to be interdisciplinary in nature, providing the biological, behavioral and cultural aspects of human sexuality. Priority will be given to candidates from the helping professions. Qualified candidates from other related disciplines must have permission of instructor.
Prerequisite: Undergraduate anatomy and physiology.

## HED 8270 - Interventions in Health Education (3)

This course will provide health education candidates wih an opportunity to investigate, contrast, develop, implement and evaluate a variety of intervention activities, to be applied in different settings. Theories regarding methods to enhance behavior change and teaching strategies to meet the health needs of a diverse population will be explored.

Prerequisite: Graduate status.

## HED 8330 - Alcohol Education (3)

A study of the problems associated with alcohol use, misuse and abuse. The patterns and trends of use, theories of dependence, pharmacological aspects and health consequences are explored. Emphasis is given to the identification of people with alcohol related problems and the role of the private and public sectors in prevention, education, intervention, and referral. Methods of assessing needs, prescribing, implementing, and evaluating alcohol education programs will be explored.

Prerequisite: None.

## HED 8400 - Health Promotion Program Planning (3)

An in-depth application of the health promotion program planning process utilizing a comprehensive model called PRECEDE-PROCEED. Candidates submit six papers applying each phase of this model: social diagnosis, epidemiological diagnosis, behavioral environomental diagnosis, educational organizational diagnosis, administrative policy diagnosis, and evaluation at the process, impact and outcome levels.
Prerequisite: None.

## HED 8556 - Health Aspects of Aging (3)

This course emphasizes health promotion for older adults. Special health needs of older Americans are compared and contrasted with health needs for other age groups. Prevention or delaying of chronic diseases and disorders are emphasized.

Prerequisite: For 8556: Graduate. For 4550: six hours of health or permission of instructor. Crosslisted as: GERO 4550 and HED 4550 and GERO 8556 and WGST 4550.

## HED 8600 - Health Behavior (3)

The purpose of this course is to study the theoretical foundations of health behavior. Candidates will develop an understanding of the determinants of health behavior, the models and theories that provide a framework for predicting health behavior, and the strategies employed to bring about behavioral changes for health and disease prevention in individuals and groups.
Prerequisite: None.

## HED 8706 - Women's Health and Issues of Diversity (3)

This course provides a critical understanding of the interrelationship between socio- cultural, economic, and political factors and women's physical and mental health. The aim is to provide an overview of the experience with the health care system. Emphasis will be on critically examing recent scholarship from a sociological, behavioral, health policy perspective.
Prerequisite: Graduate standing. Crosslisted as: HED 4700 and SOC 8706 and SOC 4700.

## HED 8730 - Dying, Death \& Grieving (3)

An examination of theory and research relevant to interaction with the terminally ill person, focusing on communication with widows and other survivors as well as the dying person.
Crosslisted as: GERO 8730.

## HED 8750 - Health Education: Instrmentation and Evaluation (3)

This course will build skills for selection, development and analysis of various types of instruments and techniques for conducting process, impact, and outcome evaluations in health education and health promotion. Evaluation of health behavior change and its antecedents, changes in community services programs, and community health status will be discussed. Candidates will learn methods for developing choosing psychometric tools, choosing appropriate evaluation designs, procedures for data collection, and describing evaluation results. Emphasis will be placed on political statistical, and theoretical aspects of instrumentation and evaluation practices.

Prerequisite: HED 8270 or permission of instructor.

## HED 8850 - Health Aspects of Stress Management (3)

The health-related aspects of stress management and control will be the focus of this course. Selected techniques for self-regulating stress will be demonstrated, practiced and analyzed. Candidates will be introduced to current scientific research in human stress.

Prerequisite: Graduate.

## HED 8950 - Public Health Leadership and Advocacy

 (3)This course incorporates public health leadership theory and practices that are grounded in biomedical and social science and sanctioned by public law. Also included is the politics of communities and organizations. Advocacy is emphasized as a key tool to secure funding and to help assure that local, state, and federal policy-makers will adopt, implement, and maintain important public health regulations, policies and programs.
Prerequisite: Fifteen (15) health education graduate credits.

## HED 8980 - Health Education Practicum (1-3)

This course offers graduate candidates in health education an opportunity to gain practical, on-the-job training in health education in local schools, businesses, hospitals clinics, voluntary health agencies or governmental health agencies.

Prerequisite: Candidates must have completed 21 credit hours at the undergraduate or graduate level (3.0 GPA or above) in health education prior to enrolling in this course.

## HED 8700 - Women's Health Issues (3)

## HIST - History

## HIST 4010 - Religion in Early America (3)

This course examines the history and nature of religion in North America to c. 1770 with an emphasis on the British colonies.

Prerequisite: Undergraduate: junior or senior standing. Graduate: graduate student enrolled in History MA program. Crosslisted as: HIST 8016 and RELI 4050.
HIST 4040 - Homescapes: The Material Culture of Everyday Life in America, 1600-1860 (3)

This course examines the culture and technologies of house forms and work landscapes in North America, 16001860.

Prerequisite: 8046: graduate student in history, or permission of the graduate chair. 4040: 60 hours. Crosslisted as: HIST 8046.

## HIST 4420 - The Sioux Tribe (3)

A cultural and historical study of the Sioux tribes emphasizing the earliest historic period to the present.

Prerequisite: UG Junior standing or permission of instructor. Crosslisted as: HIST 8426.

## HIST 4450 - Native American Environmentalism (3)

This course studies North American tribal subsistence and natural resource use practices from the early historic period to the present, Native Americans as environmentalists, and modern tribal environmentalism.

Prerequisite: UG Junior standing or permission of instructor. Crosslisted as: HIST 8456.

## HIST 4480 - The United States in the 1960s (3)

This course is a review of the economic, social, cultural, and political changes that marked the United States in the 1960s.
Prerequisite: UG: Junior standing or permission of the instructor. Crosslisted as: HIST 8486.

## HIST 4650 - History of Modern Ireland (3)

A survey of Irish history from the Act of Union of 1801 through the civil rights movement of "Troubles" of Northern Ireland in the 1970s.

Prerequisite: UG: Junior standing or permission of the instructor. Crosslisted as: HIST 8656.

## HIST 8010 - Research Directed Readings Project (1-3)

Special research problems and or directed readings arranged individually with students on topics not explored in other graduate offerings. If students do not complete all the readings during the semester in which they enroll in the course, they must complete all the readings within one academic year of their enrollment.

Prerequisite: Minimum of nine graduate hours in history completed. Permission of history Graduate Program Chair. Open only to students enrolled in the History MA program.

## HIST 8016 - Religion in Early America (3)

This course examines the history and nature of religion in North America to c. 1770 with an emphasis on the British colonies.

Prerequisite: Undergraduate: junior or senior standing. Graduate: graduate student enrolled in History MA program. Crosslisted as: HIST 4010 and RELI 4050.

## HIST 8020 - Graduate Internship (1-3)

The graduate student is supervised by a member of the faculty in a project involving part-time employment or service with a museum, historic site, historical society or other institution. Work hours, activities, reporting requirements, and responsibilities must be specified in
written agreement between employer, student, Graduate Program Chair, and/or supervising faculty member. Normally taken for 3 hours. If a hosting institution cannot commit to a supervised workload which the departmental advisor and/or Graduate Program Chair believe to be equivalent to 3 hours, course may be taken for fewer hours. In such circumstances, student may repeat course up to a total of 3 hours.

Prerequisite: Student must be enrolled in the History MA program and have completed at least 6 hours of graduate credit. Student must have approval of Graduate Program Chair (GPC) and/or supervising faculty before enrolling.
HIST 8046 - Homescapes: The Material Culture of Everyday Life in America, 1600-1860 (3)

This course examines the culture and technologies of house forms and work landscapes in North America, 16001860.

Prerequisite: 8046: graduate student in history, or permission of the graduate chair. 4040: 60 hours. Crosslisted as: HIST 4040.

## HIST 8056 - History of Women in America to 1875 (3)

This course examines the history of women in what is now the United States from the seventeenth century to 1875. Topics include law, work, sexuality and reproduction, slavery, cross-cultural encounters, religion, political activism, and the transformation of gender by the market and industrial revolutions.

Prerequisite: Graduate standing. Crosslisted as: HIST 4050.

## HIST 8066 - History of Women in America from 1875 1992 (3)

This course examines the history of women in the United States from 1875 to 1992. Topics include law, work, sexuality and reproduction, immigration, civil rights, political participation and party politics, and changes to the American gender system, including family structure and employment.
Prerequisite: 4060: Junior or permission of instructor; 8066: Graduate standing. Crosslisted as: HIST 4060 and WGST 4060 and WGST 8066.

## HIST 8126 - American Social and Intellectual History

 since 1865 (3)Primarily a non-political approach to American history, this course will examine significant topics in American thought and society.

Prerequisite: For 4120; junior or permission of instructor. Crosslisted as: HIST 4120.

## HIST 8136 - The Revolutionary Era, 1763-1789 (3)

An analysis of the imperial and internal forces which led to the revolution and an examination of the economic, social and political problems of the emerging nation.
Prerequisite: For 4130; junior or permission of instructor. Crosslisted as: HIST 4130.

## HIST 8146 - Colonial American History (3)

This course provides a study of the settlement and development of North America to c. 1763 with an emphasis on the British colonies.

Prerequisite: Undergraduate: junior standing or permission of instructor. Graduate: graduate student standing. Crosslisted as: HIST 4140.

HIST 8166 - The U.S.: Early National Period: 17891828 (3)

An interpretative study of the middle period of American history.
Prerequisite: For 4160; junior or permission of instructor. Crosslisted as: HIST 4160.

HIST 8176 - The American Frontier: 1800-1900 (3)
The Trans-Mississippi West from the Rocky Mountain Fur Trade days to the disappearance of the frontier around 1900.

Prerequisite: For 4170, junior or permission. Crosslisted as: HIST 4170.

## HIST 8186-Civil War and Reconstruction (3)

A period study from 1845 to 1877 . The background of the Civil War, the war years and the reshaping of the Union during reconstruction.
Prerequisite: For 4180; junior or permission of instructor. Crosslisted as: HIST 4180.

## HIST 8246 - The Emergence of Modern America (3)

A study of a transitional period in American history, this course considers the importance of industrialization, urbanization, immigration and the emergence of the United States as a significant world power.

Prerequisite: For 4240; junior or permission of instructor. Crosslisted as: HIST 4240.

## HIST 8276 - Twentieth Century America to 1932 (3)

A study of the history of the United States from the end of the 19th century to the election of Franklin D. Roosevelt to the presidency in 1932.

Prerequisite: For 4270; junior or permission of instructor. Crosslisted as: HIST 4270.

## HIST 8286 - Twentieth Century America since 1932 (3)

A study of the history of the United Staes since the election of Franklin D. Roosevelt to the presidency in 1932.

Prerequisite: For 4280; junior or permission of instructor. Crosslisted as: HIST 4280.

HIST 8336 - U.S. Constitutional History to 1860 (3)
A history of constitutional theory and practice to 1860.
Prerequisite: For 4330; junior or permission of instructor. Crosslisted as: HIST 4330.

HIST 8346 - U.S. Constitutional History since 1860 (3)
A history of constitutional theory and practice since 1860.
Prerequisite: For 4340: junior or permission of instructor. Crosslisted as: HIST 4340.

## HIST 8356 - American Diplomatic History (3)

A history of the foreign relations of the United States.
Prerequisite: For 4350, junior or permission. Crosslisted as: HIST 4350.

## HIST 8406 - History of North American Indians (3)

A survey of traditional North American Indian cultures, their contact with transplated European peoples, and the continuing problems faced today.
Prerequisite: For 4400; junior or permission of instructor. Crosslisted as: HIST 4400.

HIST 8416 - History of Nebraska (3)
From the earliest known records to the present.
Prerequisite: For 4410, junior or permission. Crosslisted as: HIST 4410.

HIST 8426 - The Sioux Tribe (3)
A cultural and historical study of the Sioux tribes emphasizing the earliest historic period to the present.

Prerequisite: UG Junior standing or permission of instructor. Crosslisted as: HIST 4420.

## HIST 8436 - American Urban History (3)

Historical survey of urban development in the United States from the colonial period to the present, with attention to urbanization as a social process affecting the nation at large as well as cities in particular.
Prerequisite: For 4470; junior or permission of instructor. Crosslisted as: HIST 4430.

HIST 8446 - History of the South (3)
Economic, social and political development of the south as a region.

Prerequisite: For 4440, junior or permission. Crosslisted as: HIST 4440.

HIST 8456 - Native American Environmentalism (3)
This course studies North American tribal subsistence and natural resource use practices from the early historic period to the present, Native Americans as environmentalists, and modern tribal environmentalism.

Prerequisite: UG Junior standing or permission of instructor. Crosslisted as: HIST 4450.

HIST 8476 - American Medicine and Public Health (3)
Analysis of the relationship and interaction of medical thought and practice, public health problems and institutional development, and the changes in American society and culture from the 17 th to the 20 th century.

Prerequisite: For 4470; junior or permission of instructor. Crosslisted as: HIST 4470 and WGST 4470 and WGST 8876.

## HIST 8486 - The United States in the 1960s (3)

This course is a review of the economic, social, cultural, and political changes that marked the United States in the 1960s.

Prerequisite: UG: Junior standing or permission of the instructor. Crosslisted as: HIST 4480.

HIST 8526 - Intellectual History of Modern Europe: French Revolution to Present (3)

A study of leading political, religious, economics, scientific and philosophical ideas in times of extraordinary social change.

Prerequisite: For 4520; junior or permission of instructor. Crosslisted as: HIST 4520.

HIST 8536 - The Age of the Renaissance-Reformation (3)

A study of the politics and economics of the 15th and 16th centuries as well as the achievements of Renaissance culture and the emergence of the Protestant churches and the Tretine Catholicism.

Prerequisite: For 4530; junior or permission of instructor. Crosslisted as: HIST 4530.

## HIST 8546 - Medieval Europe (3)

An examination of medieval European history with emphasis upon social and economic developments.
Prerequisite: For 4540, junior or permission. Crosslisted as: HIST 4540.

HIST 8556 - The Age of Englightenment (3)
A study of the politics and economics of the late-17th century and of the 18th century as well as the emergence of
modern secular thought and its impact upon traditional European society.

Prerequisite: For 4550; junior or permission of instructor. Crosslisted as: HIST 4550.

## HIST 8566 - The French Revolution and the Napoleonic Era, 1789-1815 (3)

Particular attention is given to the development of democratic practice concurrently with the development of modern authoritarianism.

Prerequisite: For 4560; junior or permission of instructor. Crosslisted as: HIST 4560.

## HIST 8576 - Europe: 1815-1890 (3)

A study of reform and reaction with resulted in the Balkanization of Europe.

Prerequisite: For 4570; junior or permission of instructor. Crosslisted as: HIST 4570.

## HIST 8616 - Tudor and Stuart England (3)

A study of England under the Tudors when the English people solidified the monarchy and experienced a golden age, and the Stuarts continued modernization and formulated the new institutions foreshadowing those of our world today.

Prerequisite: For 4610; junior or permission of instructor. Crosslisted as: HIST 4610.

## HIST 8626 - England: From Empire to Welfare State

 (3)A study of the change and development in Great Britain from the late 18th century to 1918.

Prerequisite: For 4620; junior or permission of instructor. Crosslisted as: HIST 4620.

## HIST 8646 - British Empire and Commonwealth (3)

Britain in America, Africa, India and the Pacific. The development of a dependent empire and transformation into independent nations.
Prerequisite: For 4640; junior or permission of instructor. Crosslisted as: HIST 4640.

## HIST 8656 - History of Modern Ireland (3)

A survey of Irish history from the Act of Union of 1801 through the civil rights movement of "Troubles" of Northern Ireland in the 1970s.

Prerequisite: UG: Junior standing or permission of the instructor. Crosslisted as: HIST 4650.

## HIST 8716 - Europe and America in the Two World Wars (3)

A military, social and political history analyzing the causes, conduct and consequences of each war, the war
time transformation of European and American society, and the emergence of the United States as a world power.

Prerequisite: For 4710; junior or permission of instructor. Crosslisted as: HIST 4710.

## HIST 8726 - The Holocaust (3)

An interdisciplinary approach in a seminar oriented format discussing various aspects of the most notorious genocide in modern times. The course will explore the history of anti-Semitism, the rise of Nazi Germany and the road to the 'final solution.' It will further explore psychological, sociological and intellectual aspects of the dark side of humanity.

Prerequisite: Undergrad: Junior or instructor permission. Crosslisted as: HIST 4720 and RELI 4160 and RELI 8166.

## HIST 8736 - Israel and Palestine (3)

This course will outline the history of the conflict over Palestine/Israel, examine its present status, and explore its likely unfolding in the future. It seeks to provide a broad and concise understanding of the historical events which have shaped the relations between Israelis and Palestinians, as well as a keen awareness of the challenges and prospects related to their future.

Prerequisite: Undergraduate: Junior standing or permission of the instructor. Crosslisted as: HIST 4730.

## HIST 8776 - Europe: 1890-1932 (3)

A study of the conditions and forces immediately precedent to World War I, the war itself, the peace following the war and the rise of the modern dictatorships.

Prerequisite: For 4770; junior or permission of instructor. Crosslisted as: HIST 4770.

## HIST 8786 - Europe: 1993 to the Present (3)

A study of the ever increasing tensions between the Facist and Communist dictatorships and the Western democracies, World War II, the resultant dislocation of power and the emergence of the balance of terror.

Prerequisite: For 4780; junior or permission of instructor. Crosslisted as: HIST 4780.

## HIST 8916 - Topics in History (3)

A course on selected topics offered on a one-time or occassional basis. Course may be repeated as long as the topic is different each time. Cross listed with WMST 4910/8916 when topics are appropriate to Women's Studies.

Prerequisite: Undergrad: Junior or permission of instructor. Crosslisted as: HIST 4910.

## HIST 8990 - Thesis (1-6)

Thesis research project written under supervision of an adviser.

Prerequisite: Completion of twenty-four hours of history graduate work. Approval of Graduate Program Chair.

## HIST 9100 - Seminar in History (3)

This seminar guides advanced graduate students through critical readings and practices in historical research or historiography. Topics will vary and course can be repeated under different topics.

Prerequisite: Open only to History MA students who have completed HIST 3930 or equivalent. Non-History MA students may be admitted after consultation with History GPC and instructor.

## HPER Health Physical Ed Recreation

HPER 8000 - Special Studies (1-3)
A series of intensive courses - scheduled as regular seminars or workshops according to purpose.
Prerequisite: Permission of department.

## HPER 8030 - Research in Health, Physical Education and Recreation (3)

The course deals with scientific writing, research techniques, statistics, computer application, and quantitative research design and technique. Considerable emphasis is placed on evaluation of research in scholarly publications. A research proposal is written as one of the course requirements.

Prerequisite: None.
HPER 8100 - Research Project (1-3)
Individual or group study and analysis of specific problems in health, physical education or recreation.

Prerequisite: Permission of instructor.

## HPER 8220 - Problems and Issues in HPER (3)

An examination of current problems and issues in HPER that relate to the general aims and purposes of HPER.

Prerequisite: Graduate status.
HPER 8300 - Analysis of Research and Literature in Human Movement (3)

Survey of research and literature in Human Movement for the purpose of orienting the candidate to possible areas of research and developing an understanding of and appreciation for writings in the filed. The course may be offered focusing on only one specific area in HPER.

Prerequisite: HPER 8030 Research Methods.

## HPER 8500 - Qualitative Research Methods (3)

An examination of qualitative research methods. Emphasis on the broad application of qualitative research in public health, education, and social sciences. Course topics include research design, data collection, data analysis, and reporting.

Prerequisite: HPER 8030 or equivalent and at least 6 hours graduate credit. Permission of instructor.

## HPER 8850 - Exercise for Special Populations (3)

The course will examine the physiological and medical limitations imposed on people with various common chronic diseases/conditions including arthritis, osteoporosis, exercise-induced asthma, obesity, diabetes, hypertension and pregnancy. Special groups such as children and elders will be discussed. Content will emphasize the etiology and guidelines for exercise testing, prescription, and supervision.
Prerequisite: PE 49408946.

## HPER 8990 - Thesis (1-6)

The thesis experience is designed to help develop the candidatel\I's ability to execute accepted procedures associated with the research process appropriate to the Masterl\I's degree.

Prerequisite: Permission.

## IASC - Information Assurance - Science

## IASC 4360 - Foundations of Information Assurance (3)

Contemporary issues in computer security, including sources for computer security threats and appropriate reactions; basic encryption and decryption; secure encryption systems; program security, trusted operating systems; database security, network and distributed systems security, administering security; legal and ethical issues.

Prerequisite: CSCI 3320/8325 OR ISQA 3300 OR By instructor permission. Crosslisted as: IASC 8366 and CSCI 8366.

## IASC 8080 - Special Topics in Information Assurance (1-6)

The course provides a format for exploring advanced research areas for graduate students in Information Assurance and related fields. Specific topics vary, in keeping with research interests of faculty and students. Examples include applied data mining, mobile security, web services and applications, vulnerability assessments, cloud computing security, and other issues in Information Assurance research.

Prerequisite: Instructor Permission.

## IASC 8366 - Foundations of Information Assurance (3)

Contemporary issues in computer security, including sources for computer security threats and appropriate reactions; basic encryption and decryption; secure encryption systems; program security, trusted operating systems; database security, network and distributed systems security, administering security; legal and ethical issues.

Prerequisite: CSCI 3320/8325 OR ISQA 3300 OR By instructor permission. Crosslisted as: IASC 4360 and CSCI 8366.

## IASC 8420 - Software Assurance (3)

Software assurance is a reasoned, auditable argument created to support the belief that the software will operate as expected. This course is an intersection of knowledge areas necessary to perform engineering activities or aspects of activities relevant for promoting software assurance. This course takes on a software development lifecycle perspective for the prevention of flaws.

Prerequisite: CSCI 4830/ CSCI 8836 Introduction to Software Engineering OR by permission of the Instructor.

## IASC 8456 - Host-Based Vulnerability Discovery (3)

The class will cover security issues at an implementation and hardware level. The students will learn assembly language and the use of a reverse assembler and debugger. This will allow the student to analyze various "packing" algorithms for computer viruses, the viruses themselves, operating system "hooking", "fuzzing", and other machine code, host-based exploits. The class will be using both Windows and Linux as operating systems.

Prerequisite: Permission of the instructor. Crosslisted as: IASC 4450.

IASC 8900 - Independent Study (3)
IASC 8990 - Thesis in Information Assurance (1-6)
A research project, designed and executed under the supervision of the chair and approval by members of the graduate student's thesis advisory committee. In this project the student will develop and perfect a number of skills including the ability to design, conduct, analyze and report the results in writing (i.e., thesis) of an original, independent scientific investigation.

Prerequisite: Instructor Permission.

IASC 8356 - Advanced Vulnerability Discovery (3)
IASC 8386 - Computer and Network Forensics (3)
IASC 8410 - Distributed System and Network Security (3)

IASC 8440 - Secure Systems Engineering (3)
IASC 8490 - Advanced Computer Forensics (3)
IASC 8510 - Information Technology Governance \& Compliance (3)

IASC 8520 - Business Continuity \& Disaster Planning (3)

IASC 8950 - Capstone in Information Assurance (3)
ISMG - Industrial and Management Systems Engineering

## ISMG 8066 - Decision \& Risk Analysis (3)

Extension of basic concepts of engineering economy and managerial economics to decision making under risk and uncertainty.

Crosslisted as: ISMG 4060.

## ISMG 8126-Occupational Safety - A Systems Analysis

 (3)Analysis of safety performance, attribution of cost, identification and analysis of accident potential. Fault Tree analysis. Systems safety and reliability.

Prerequisite: ISMG 3210. Crosslisted as: ISMG 4120.
ISMG 8176 - Occupational Safety Hygiene Engineering (3)

Introduction to occupational hygiene engineering with emphasis on workplace environmental quality. Heat, illumination, noise, and ventilation.

Prerequisite: Senior standing or permission. Crosslisted as: ISMG 4170.

## ISMG 8406 - Discrete Event Simulation Modeling (3)

Development of simulation models of discrete systems. Model development, Monte Carlo techniques, random number generators, and output analysis.

Prerequisite: ISMG 2060 and 3210; CSCI 155 (IMSE 206 and 321). Crosslisted as: ISMG 4400.

## ISMG 8600 - Packaging Engineering (3)

Investigation of packaging processes, materials, equipment and design. Container design, material handling, storage, packing and environmental regulations, and material selection.

Prerequisite: ISME 206, ISME 321, ENGM 373 (UNL).

## ISMG 8760 - Computers in Manufacturing (3)

Interfacing issues; data acquisition; A/D-D/A conversions; sensors and sensor-based computing; control systems and adaptive control; and real time control of mechanical devices.

Prerequisite: ELEC 2310.
ISMG 8770 - Robotics (3)
Basic robotics technology; application in manufacturing, manipulators and mechanical design; programming languages; intelligence and control.

Prerequisite: IMSE 375.

## ISMG 8986 - Laboratory Investigation (1-6)

Investigation and written report of research into a specific problem in any area of industrial or management systems engineering.

Prerequisite: Senior standing and permission. Crosslisted as: ISMG 4980.

ISMG 9050 - Analysis of Engineering Management (3)
Continuation of concepts and principles of engineering management applied to production cases.

Prerequisite: ISMG 8056.

## ISMG 9220-Quality Engineering: Use of Exper. Design \& Other Techniques (3)

Extension of industrial quality control methods and techniques. Off-line and on-line quality control methods. Development of quality at the design state through planned experiments and analyses. Experimental design methods will include factorial, $2 \mathrm{k}, 3 \mathrm{k}$, and factional factorials designs. The course will include an applied project in design of quality.

## ISMG 9960-Advanced Topics in Industrial Engineering (3)

( 3 cr each, 12 max.) Current topics in major areas of study with the Department of Industrial and Management Systems Engineering that are pertinent to ISMG graduate students, in the areas of: A. Engineering Management; B. Human Factors Engineering; C. Manufacturing Engineering; D. Operations Research

## ISQA Info Systems Quant Analysis

ISQA 4160 - Introduction to Enterprise Resource Planning (3)

Introduction to Enterprise Resource Planning (ERP) is designed to expose students to the primary enterprise application that forms the information systems (IS) infrastructure for most large organizations today. The primary purpose of this course is for students to gain an
understanding of the enterprise wide, cross-functional nature of ERP software. In the process of learning about ERP systems, the students develop "hands on" experience with the largest and most well-known ERP application, SAP.

Prerequisite: CIST 2100 or equivalent. Crosslisted as: ISQA 8166.

## ISQA 8016 - Business Intelligence (3)

This course intends to provide graduate students in-depth exposure to the growing field of business intelligence. Business intelligence (BI) consists of the set of concepts and techniques used to analyze business data in support of decision-making and planning. BI spans a number areas of management information systems, including Decision Support Systems (DSS), Enterprise Resource Planning (ERP), Data Warehousing, Knowledge Management, Customer Relationship Management, Data Mining, and others.

Prerequisite: ISQA 4150/8156; ISQA 8040; \& ISQA 8050.

## ISQA 8040 - An Overview of Systems Development (3)

The course presents an overview of information systems and the systems development lifecycle. Course emphasis will focus on theory, current tools and techniques that the programmer or analyst can use to develop and document information systems. This course may not be used in a plan of study for any graduate program at UNO.

Prerequisite: CIST 2100 or equivalent.

## ISQA 8050 - Data Organization and Storage (3)

The course will provide concepts of hardware performance, file structures, database design, and database management. The performance implications of various design decisions will be explored. The purpose of this course is to prepare the student for further graduate-level study of information systems. This course may not be used in a plan of study for any graduate program at UNO.

Prerequisite: Two semesters of programming or demonstrable equivalent experience.

## ISQA 8060 - Research in MIS (3)

This course covers research methods and their application to the development and evaluation of management information systems. Also covered is the relationship between organization theory and IS research.

Prerequisite: CIST 2500, CIST 2100, and ISQA 8040, or permission of the instructor.

## ISQA 8080 - Seminar in Management Information Systems (1-5)

This course is designed to acquaint students with issues which are current to the field or harbingers or emerging
trends in the information systems area. Topics will vary across terms. This course may be repeated, but no topic may be taken more than once.

Prerequisite: 1) Permission of the instructor. 2) Additional prerequisite courses may be required for particular course offerings.

## ISQA 8156 - Advanced Statistical Methods for IS\&T

(3)

This course emphasizes the application and interpretation of statistical methods including design of experiments, analysis of variance, multiple regression, and nonparametric procedures and the use of statistical computer packages. The intent is to develop quantitative abilities needed for quantitatively intensive jobs and for advanced study in management information systems, computer science and information technology.
Prerequisite: CIST 2500 or equivalent (at least one course in statistics), and an understanding of basic calculus (a calculus review will be conducted at the beginning of class). Crosslisted as: ISQA 4150.

## ISQA 8160 - Applied Distribution Free Statistics (3)

The primary objective of this course is to expose students to methods of analyzing data from non-normal populations including binomial tests, contingency tables, use of ranks, Kolmogorov-Smirnov type statistics and other selected topics.

Prerequisite: ISQA 4150/8156 or equivalent.

## ISQA 8166 - Introduction to Enterprise Resource Planning (3)

Introduction to Enterprise Resource Planning (ERP) is designed to expose students to the primary enterprise application that forms the information systems (IS) infrastructure for most large organizations today. The primary purpose of this course is for students to gain an understanding of the enterprise wide, cross-functional nature of ERP software. In the process of learning about ERP systems, the students develop "hands on" experience with the largest and most well-known ERP application, SAP.

Prerequisite: CIST 2100 or equivalent. Crosslisted as: ISQA 4160.

## ISQA 8180 - Electronic Commerce (3)

Electronic Commerce is the digital enablement of transactions between multiple parties.A multitude of technologies, tools and applications have brought about changes in business, and society that require careful consideration. Students are given an overview of electronic commerce business models and required to apply these to solve business problems or take on opportunities presented. They will cover topics such as social networking, electronic markets, and political and ethical
issues associated with electronic commerce, and business plans for technology ventures. They will apply these concepts using Web 2.0 tools, mobile applications and website design assignments.
Prerequisite: ISQA 8310 or ISQA 3400.

## ISQA 8206 - Information and Data Quality Management (3)

The course primarily focuses on developing an in-depth understanding of Data and Information Quality (DQ and IQ) concepts and issues. On completing this course students will be able to understand and use DQ and IQ Concepts in Information Systems projects, be able to recognize various patterns of Data and Design Deficiencies in Systems and be able to suggest appropriate DQ and IQ improvement plans in light of known deficiencies in systems.

Prerequisite: CIST 2500; and ISQA 3310 or 8050. Crosslisted as: ISQA 4200.

## ISQA 8210 - Management of Software Development (3)

This course will integrate concepts and techniques from software engineering, management science, psychology, organization behavior, and organization change to identify, understand, and propose solutions to the problems of software project management. The purpose of the course is to prepare the student for leadership positions in software development and software maintenance.

Prerequisite: ISQA 8040 or equivalent.

## ISQA 8220 - Advanced Systems Analysis and Design (3)

This course is a systems analysis and design course for systems and business analysts. The course presents an overview of object-oriented system analysis and design. The course will then focus on theory, best practices, and modern methodologies that analysts can use to analyze and design information systems.
Prerequisite: ISQA 8040 or (ISQA 4110 and ISQA 4120) or equivalent.

## ISQA 8230 - Telecommunications Management (3)

This course will focus on the management required to operate today's complete telecommunications networks. The course will be based on the standards that are currently in place as well as examining the future directions. The student, upon the successful completion of this course, will have: an operational knowledge of the components of complex telecommunications networks, the management structures computer systems needed to maintain that network, and the security solutions used to protect that network.

Prerequisite: Acceptance into the graduate program of MIS or CSCI or by permission of the instructor. Crosslisted as: CSCI 8220.

## ISQA 8240 - Telecommunications Planning, Analysis and Design (3)

This course presents an in-depth discussion of systems analysis, design and implementation of telecommunication systems with a special emphasis on wide area networking and internetworking systems. The primary purpose of this course is to introduce students to methods, tools, techniques, and technology choices for telecommunication systems planning, analysis, design and implementation.
Prerequisite: ISQA 8220 and 8310.

## ISQA 8250 - Facilitation of Collaborative Problem

 Solving (3)The course focuses on the facilitation of collaborative problem solving and decision making processes. Students learn how to design and facilitate collaborative workshops, with support from both paper-based and electronic meeting tools. The course is hands-on and experiential, with students working in small teams to conduct real workshops.

Prerequisite: None.

## ISQA 8306 - Database Administration (3)

This course is designed to give students an applied, practical introduction to database administration. Students will gain an understanding of the functioning of a database management system and its relationship to the computing environment in which it runs. They will learn the concepts, principles, and techniques necessary to carry out such functions as database object creation, storage management, capacity planning, performance tuning, backup and recovery, and security management. Each semester the course will focus on one commercial database management system (DBMS), such as Oracle.

Prerequisite: Undergraduate - ISQA 3300 ISQA 3310 or CSCI 4850 ; graduate - ISQA 8050, or equivalent. Crosslisted as: ISQA 4300.

## ISQA 8310 - Data Communications (3)

This course will provide a comprehensive review of data and computer communications for business information systems within the framework of the ISO OSI model, evolving techniques for effective data communications, telecommunications infrastructure and services, and the design and management of organizational data and voice communications resources.

Prerequisite: CIST 2100 or equivalent.

## ISQA 8340 - Applied Regression Analysis (3)

The primary objective of this course is to expose students to regression models and applications with particular emphasis on applying these concepts to IT research. Topics to be discussed include: Foundations of regression analysis using least squares procedures; model
formulation, stepwise regression, transformations; graphical methods, estimation; inference; influence diagnosis; matrix formulation, multicollinearity, time series, and nonlinear models.

Prerequisite: ISQA 4150/8156 or equivalent.

## ISQA 8380 - Managing the Distributed Computing Environment (3)

The course introduces students to concepts, issues, and tools needed to design and manage distributed computing environments. It focuses on distributed technologies in building and managing distributed systems, and the strategic relationship between business processes and the information systems architecture.
Prerequisite: ISQA 8310 and 8050 or equivalent.

## ISQA 8400 - Clinical Systems Architecture and Function (3)

This course serves to integrate multiple topics into an understanding of clinical health care information system history, architecture, and design. The needs of multiple disciplines will be explored to understand how they can share, communicate, and manage patient information using clinical information standards.

Prerequisite: Permission of instructor.

## ISQA 8410 - Database Management (3)

The course provides in-depth coverage of such areas as: the relational model, SQL, data modeling, data quality management, database design, database administration security, data warehousing. The course offers a mix of theoretical treatment and hands-on application. Current DBMS and data modeling software will be used.
Prerequisite: ISQA 8050 or equivalent.

## ISQA 8420 - Managing the IS Function (3)

The course provides a focus on the business management implications of the information explosion. The course is organized around a management audit of the information services activity to help present and future managers recognize and implement effective information services management.
Prerequisite: CIST 2100 and ISQA 8040.

## ISQA 8500 - Readings in Clinical Informatics (3)

An overview of clinical informatic topics with readings covering history, foundation knowledge and current developments in the field. The purpose of this course is to provide integrative knowledge of theory and applications in clinical informatics. NOTE: This course is crosslisted with UNMC's SURG 850.
Prerequisite: Student must have completed all MS in IS core courses and have permission of the department to enroll in courses for the Health Informatics concentration.

## ISQA 8510 - Managing Usability Functions in Systems Development Organiz. (3)

This course deals with usability of information systems, from the perspective of organizing and managing usability functions in a systems development organization. After briefly introducing the background to system usability and usability principles, the course focuses specifically on the introduction, organization, support, management and evaluation of usability functions in systems development organizations. The role of the usability professional in the organization is emphasized.

Prerequisite: Two semesters of programming or demonstrable experience and ISQA 8040 or equivalent.

## ISQA 8525-Graphical User Interface (3)

A study of the visual design for graphical user interface utilized in the development of business applications. The course includes a hands-on survey of the most prominent business software applications and an application project.

Prerequisite: Completion of foundation courses.
Crosslisted as: ISQA 3520.

## ISQA 8530 - E-Commerce Security (3)

The course will integrate concepts, principles, and technologies from business, telecommunications, and computer science to identify, understand, and propose solutions to the security threats to e-commerce.
Prerequisite: CIST 2100 and ISQA 8310.

## ISQA 8546 - Computer Security Management (3)

The purpose of this course is to integrate concepts and techniques from security assessment, risk mitigation, disaster planning, and auditing to identify, understand, and propose solutions to problems of computer security and security administration.

Prerequisite: CIST 4360 or permission of the instructor. Crosslisted as: CIST 4540.

## ISQA 8560 - Information Warfare and Security (3)

This course will study the nature of information warfare, including computer crime and information terrorism, as it relates to international, national, economic, organizational, and personal security. Information warfare policy and ethical issues will be examined.

Prerequisite: CIST 2100 or BSAD 8030, or permission of instructor required.

## ISQA 8570 - Information Security Policy and Ethics (3)

The course will cover the development and need for information security policies, issues regarding privacy, and the application of computer ethics.
Prerequisite: CIST 2100 or BSAD 8030, or permission of instructor.

## ISQA 8580 - Security Risk Management and Assessment (3)

The purpose of this course is to prepare the student for managing information security at the organizational level. This course will combine concepts from strategic management, decision science and risk analysis to prepare the student to integrate security issues into an organizational strategic planning process.
Prerequisite: ISQA 8060 \& ISQA 8540 or equivalents.

## ISQA 8596 - IT Audit and Control (3)

This course explores organizational and managerial issues relevant to planning and conducting IT audit and control activities. The course covers the following conceptual areas: business risks and the management of business risk, IT risk as a component of business risk, the need to manage IT risks, and the basic type of controls required in a business system in order to control IT risks. Issues associated with new risks created by the use of the internet for business applications and electronic business are also covered.

Prerequisite: A solid understanding of business foundations such as accounting and introductory auditing and exposure to the IS discipline is essential for success in this course. Permission of Instructor is required to enroll. Crosslisted as: ISQA 4590.

## ISQA 8700 - Data Warehousing: Theory and Practice (3)

This course teaches students theoretical issues as well as practical methods for designing and constructing a data warehouse. To provide an in-depth perspective on the matter, the course will cover the essential concepts, issues, techniques and methods of the design and construction of the data warehouse, within the framework of a data warehouse architecture.

Prerequisite: ISQA 8050, 8310, and 8040 or equivalents.

## ISQA 8810 - Information Technology Project Fundamentals (3)

The course will integrate concepts and techniques from management science, psychology, organizational behavior, administration change to identify, understand propose solutions to the problems of project management. The purpose of the course is to prepare the graduate for project participation and leadership.
Prerequisite: CIST 2100; and ISQA 8040.

## ISQA 8820 - Project Risk Management (3)

This course will cover project risk management, i.e., the process of measuring or assessing risk in projects and then developing strategies to manage the risk. The topics covered in detail will include: Risk Management Planning, Risk Identification, Quantitative Risk Analysis, Qualitative

Risk Analysis, Risk Response Planning, and Risk Monitoring and Control. Students will learn how to apply and use the tools and techniques needed to perform these project management tasks. A collection of readings on risk management from the empirical literature coupled with risk management standards from organizations such as IEEE and the Project Management Institute (PMI) will be used to provide the student with an excellent foundation in risk management and control.
Prerequisite: ISQA 8810 or permission of instructor.

## ISQA 8900 - Independent Research in Management Information Systems (1-3)

The content of the course will vary. However, both the student and the faculty member must sign an Independent Research Agreement and file it with the Master of Science in Management Information Systems Graduate Program Committee before registration for the course. This agreement will detail the project, the schedule for its completion, the form of the output, the method of evaluation and other relevant information pertaining to the project.
Prerequisite: Permission of instructor, and at least 12 hours of course work toward a M.S. in MIS should be completed.

## ISQA 8950 - Capstone Management Information

 Systems (3)The course consists of a student executed Information Systems design project providing an in-depth practical experience. It typically covers system conceptualization, analysis, and design. It may also involve prototyping. The project will typically not include the actual implementation of the system. This course replaces the MS in MIS comprehensive exam requirement.

Prerequisite: Students must have 6 credit hours or fewer left in the program. Students must have completed all core classes except ISQA 8380.

## ISQA 8990 - Thesis (3)

A research project designed and executed under supervision of a Thesis Advisory Committee. Student will develop skills, including the ability to design, conduct, analyze, and report results in writing (i.e., thesis) of an original, independent, scientific investigation. Student's Thesis Advisory Committee must approve the project plan.
Prerequisite: Graduate major in MIS and approval of the Thesis Advisory Committee.

## ISQA 8090 - Research Methods (3)

ISQA 8110 - Structured Software Design (3)
ISQA 8186 - Electronic Commerce (3)

## ISQA 9010 - Foundations of Information Systems Research (3)

This course covers the following areas: (1) information systems as an academic discipline including classic readings in IS and its reference disciplines, (2) theory development and evaluation, (3) research methods applicability in IS.
Prerequisite: Doctoral student standing in the information systems areas or with the permission of the instructor; ISQA 8060 or equivalent.

## ISQA 9020 - Technical \& Process Issues in Information Systems Research (3)

This seminar is a survey course on the technical and process issues in information systems research. The course balances the acquisition of knowledge about the conduct of research in technical and process issues with the application of that knowledge to research on information systems. Major topics include: software engineering, programming, data base systems, decision support systems, data warehousing and mining systems, object-oriented systems, adaptive and expert systems, client-service systems, information filtering and multimedia systems, information agents, mobile computing,
telecommunications, and electronic commerce.
Prerequisite: Doctoral student standing in the information systems area or with the permission of the instructor; ISQA 9010 is recommended.

## ISQA 9030 - Behavioral \& Organizational Issues in Information Systems (3)

This seminar is a survey course on the behavioral and organizational issues in information systems research. The course balances the acquisition of knowledge about the conduct of research in behavioral and organizational issues with the application of that knowledge to research on information systems. Major topics include: foundations of behavioral and organizational research in Information Systems; general research on systems design and problem solving; cognitive perspectives; decision making processes; human aspects of computing; computermediated communication; systems development; IS implementation; organizational change; organizational structure and new forms; information systems adoption; management of the information systems function; social, cultural, and ethical issues in information systems; and project management.
Prerequisite: Doctoral student standing in the information systems area or with the permission of the instructor; ISQA 9010 is recommended.

## ISQA 9120 - Applied Experimental Design and

 Analysis (3)Constructing and analyzing designs for experimental investigations; completely randomized, randomized complete block and Latin-square designs, split-plot designs, incomplete block designs, confounded factorial designs, nested designs, and treatment of missing data, comparison of designs. The course will use computerassisted analysis and graphic techniques included in software such as SAS or SPSS.

Prerequisite: ISQA 4150/8156 or consent of instructor.

## ISQA 9130 - Applied Multivariate Analysis (3)

The use of multivariate analysis for solving business problems. MANOVA, factor, cluster, and discriminant analysis techniques in IT research. The course will use computer-assisted analysis and graphic techniques included in software such as SAS or SPSS.

Prerequisite: ISQA 4150/8156 or consent of instructor.

## ISQA 9900 - Advanced Research in Information Systems (3)

This course provides a format for exploration of highly focused advanced topics of interest to doctoral students in the information systems and/or information technology area. Topics covered will change periodically in keeping with the interests of faculty and students.

Prerequisite: Admission to Ph.D. program in Information Technology or permission of instructor. Crosslisted as: COMM 9400.

## JOUR - Journalism

## JOUR 8016 - History of Mass Communication (3)

The American mass media from 17th century origins to present, with emphasis on mass communication aspects of literary, intellectual, social and political history, and their relationships to current media issues.

Crosslisted as: JOUR 4010.

## JOUR 8226 - Literary Journalism (3)

Survey of the journalistic works of pertinent American writers through readings, lectures, discussions, plus creative writing assignments.

Crosslisted as: JOUR 4220.

## JOUR 8246 - Public Relations Case Studies (3)

The course is designed to enable the student: 1) to integrate issue-management and decision-making theoretical models with the communication theory and research techniques presented in JOUR 4230/8236 and 2) to apply professional judgement to the public relations problem-solving process
through the development of structured analysis of historical cases.

Crosslisted as: JOUR 4240.

## JOUR 8376 - Communication Workshop (3)

A workshop to explore communication theory and processes and to develop skills in their application.

Crosslisted as: JOUR 4370.

## JOUR 8406 - Mass Media Ethics (3)

The study of mass media as social institutions, particularly in their interaction with government and the public, with emphasis on ethical considerations.

Crosslisted as: JOUR 4400.

## JOUR 8416 - Communications Law (3)

A discussion of laws, court decisions, constitutional issues and regulations that affect the mass media, with emphasis on libel, privacy, confidentiality of reporters' sources, prior restraint, obscenity regulation, free press fair trial, commercial speech, broadcast regulation and intellectual property.

Crosslisted as: JOUR 4410.
JOUR 8426 - Theories of the First Amendment: Speech and Press (3)

An examination of freedom of communication in the United States with particular attention to freedom of the mass media and the many attempts at censorship. The course examines the philosophical and legal aspects of freedom of speech and press and the theories held by legal scholars.

Crosslisted as: JOUR 4420.

## JOUR 8506 - Mass Communication and Public Opinion (3)

A study of the philosophy, process and effects of mass communication in the U.S., the relationship between the mass media and public opinion, and the nature, function and measurement of public opinion.

Crosslisted as: JOUR 4500.

## JOUR 8836 - Technical Communication (3)

Technical Communication introduces students to the field of technical communication. Students will study the development of print and electronic genres common to industry settings, the design and production of technical documents, the writing processes and work practices of professional technical communicators, and the roles of technical communicators in organizational contexts.

Prerequisite: Graduate standing or permission of instructor. Crosslisted as: JOUR 4830 and ENGL 4830 and ENGL 8836.

## JOUR 8856 - Information Design for Technical Communicators (3)

This course introduces students to strategies for integrating visual and textual elements of technical documents. Instruction will focus on design theory and application through individual and collaborative projects. Students will develop the professional judgment necessary for making and implementing stylistic choices appropriate for communicating technical information to a lay audience.

Prerequisite: Graduate standing or permission of instructor. Crosslisted as: ENGL 4850 and JOUR 4850 and ENGL 8856.

## JOUR 8896 - Capstone Course in Technical Communication (3)

In this capstone course, students will extend foundational skills learned in previous technical communication courses. Students will demonstrate their competency of the technical documentation process in organizational environments, the issues important to the technical communication profession, and the practices of writing and creating complex technical documents for specific purpose and audience.

Prerequisite: Graduate standing or permission of instructor. JOUR 8816, 8836, 8856 and 8876 highly recommended. Crosslisted as: ENGL 4890 and JOUR 4890 and ENGL 8896.

## JOUR 8906 - Seminar in Mass Communication (3)

A senior seminar applying historical and theoretical perspective to current issues and developments in mass communications.

Crosslisted as: JOUR 4900.

## JOUR 8916 - Seminar in Mass Communication (3)

A senior seminar applying historical and theoretical perspective to current issues and developments in mass communications.

Crosslisted as: JOUR 4910.
JOUR 8386 - Film Theory \& Criticism (3)
JOUR 8879 - Technical Editing (3)
JOUR 8926 - Media Literacy (3)

## LLS - Latino Latin American Studies

## LLS 8906 - Independent Study (1-3)

This course is designed for those students who are independently pursuing an area of Latino/Latin American Studies that is not covered under the existing curriculum. The student will be supervised by a member of the faculty of the LLS program. All course assignments, requirements, and expectations will be clearly indicated in advance. May
be repeated for credit, up to six hours, under a different topic.

Prerequisite: Permission of LLS faculty member required.

## LLS 8916 - Contemporary Topics in LLS: Social Sciences (3)

A discussion-led course on current and evolving issues and questions pertaining to the Latino and Latin American immigrant population in the United States and its transnational ties to Latin America and the Caribbean. Topics fall within the social sciences. The course may also include service-learning assignments when appropriate.

Prerequisite: For UG: Must have taken at least one social science course as well as a different LLS course, junior standing or above and/or permission of the instructor. For GR: A graduate student in good standing and instructor permission. Crosslisted as: LLS 4910.

## LLS 8926 - Contemporary Topics in LLS: Humanities (3)

This course is an interdisciplinary topical approach that explores various aspects of Latino/Latin American Studies. Selected topics will be suitable for examination from the perspective of the humanities (literature, art, dance, music, theatre, and philosophy topics). Topics and disciplines will vary from term to term. Course description will be announced in advance. Repeatable up to nine credits if content differs.

Prerequisite: Undergraduate: One humanities and one LLS course and junior standing or permission of the instructor. Graduate: A graduate student in good standing. Crosslisted as: LLS 4920.

## MATH - Mathematics

## MATH 8010 - Statistical Research for Mathematics Teachers (3)

This course is designed for graduate students in the MAT program who select the statistics option to complete their degree. The student will do a literature review, design a study involving mathematics education, gather and analyze the data, and prepare a manuscript for submission to a refereed journal. (The course will not count toward a major in the MA or MS program.)
Prerequisite: STAT 8015 and TED 8010.
MATH 8020 - Topics in Geometry and Topology (3)
Symmetry, Platonic solids, Symmetry groups including finite Dihedral groups the Euclidean group and lattice point groups, graph theory, topology of the plane, Euler Characteristic and classification of closed surfaces. Connections to the high school classroom will be explored.

Prerequisite: Secondary teacher certification or working toward it, or permission of instructor.

## MATH 8040 - Topics in Computer Science (3)

An introduction to digital computers and programming techniques. Brief history of the development of computing, a survey of the applications of computers, and the implications of the use of computers in education. (This course will not count toward the M.A. or M.S. degrees in Mathematics.)

Prerequisite: Teacher certification or working toward it, or permission of instructor.

## MATH 8050 - Algorithm Graph Theory (3)

Review of the basic concepts of graphy theory. Introduction to perfect graphs and their characterizations. Main classes of perfect graphs and their properties. Algorithms for main problems of perfect graphs. Applications of perfect graphs in several fields such as scheduling, VLSI and communication networks.

Prerequisite: CSCI 3320/8325 and MATH 4150/8156 or permission of instructor. Crosslisted as: CSCI 8050.

## MATH 8056 - Linear Algebra (3)

The theory of vectors, vectorspaces, inner product spaces, linear transformations, eigenvalues, canonical forms, complex vectors and matrices and orthogonality. Unlike MATH 2050, this course emphasizes the theoretical aspects of linear algebra.
Prerequisite: MATH 2050; MATH 2030 or 2230 or equivalent; or permission. Crosslisted as: MATH 4050.

MATH 8060 - Algorithmic Combinatorics (3)
Classical combinatorial analysis graph theory, trees, network flow, matching theory, external problems, block designs.

Prerequisite: MATH/CSCI 3100/8105. Crosslisted as: CSCI 8060.

## MATH 8080 - Design and Analysis of Algorithms (3)

The study of algorithms important in computer programming. Principles and underlying concepts of algorithm design, fundamental techniques of algorithm analysis, typical types of algorithms. Related topics such as algorithms and computer architecture.
Prerequisite: MATH/CSCI 3320/8325 or equivalent. Crosslisted as: CSCI 8080.

## MATH 8116 - Abstract Algebra (3)

Advanced undergraduate (beginning graduate) course in abstract algebra to include congruences, axioms for number systems, group axioms, group theory, homorphisms, isomorphisms, quotient groups, and introduction to rings, intregal domains, and fields.
Prerequisite: MATH 4030/8036 or MATH 4560/8566 or permission of instructor. Crosslisted as: MATH 4110.

## MATH 8126 - Abstract Algebra II (3)

Beginning graduate course in abstract algebra to include rings, integral domains, fields, vector spaces, ideals, algebraic number fields, finite fields, and introduction to Galois Theory.
Prerequisite: MATH 4110/8116. Crosslisted as: MATH 4120.

## MATH 8235 - Introduction to Analysis (3)

Provides a theoretical foundation for the concepts of elementary calculus. Topics include the real number system, topology of the real line, limits, functions of one variable, continuity, differentiation, integration.
Prerequisite: MATH 1970, and MATH 2030 or MATH 2230 or equivalent. Crosslisted as: MATH 3230.

MATH 8236 - Mathematical Analysis I (3)
Provides a theoretical foundation for the concepts of elementary calculus. Topics include ordered fields and the real number system, basic properties of complex numbers, metric space topology, sequences and series in Rk, limits and continuity in a metric space, monotonic functions.
Prerequisite: MATH 3230/8235 or equivalent. Crosslisted as: MATH 4230.

## MATH 8246 - Mathematical Analysis II (3)

Provides a theoretical foundation for the concepts of elementary calculus. Topics include differentiation and Riemann-Stieltjes Integration, sequences and series of functions, uniform convergence, power series, functions of several variables, Implicit Function Theorem.
Prerequisite: MATH 4230/8236. Crosslisted as: MATH 4240.

## MATH 8250 - Partial Differential Equations (3)

Linear and non-linear first order equations, classification of second order linear equations, elliptic, hyperbolic and parabolic equations and boundary value problems, Green's functions.

Prerequisite: MATH 4230/8236 or MATH 4330/8336.

## MATH 8276 - Complex Variables (3)

Differentiation, integration and power series expansions of analytic functions, conformal mapping, residue calculus, and applications.

Prerequisite: MATH 3230/8235 or equivalent. Crosslisted as: MATH 4270.

## MATH 8306 - Deterministic Operations Research Models (3)

This is a survey course of deterministic operations research models and algorithms. Topics include linear
programming, network programming, and integer programming.

Prerequisite: MATH 2050. Crosslisted as: MATH 4300 and CSCI 8306 and CSCI 4300.

## MATH 8370 - Fuzzy Set Theory and Operations Research (3)

Study in fuzzy set theory and its applications in mathematics, operations research, computer science and other modern problems.

Prerequisite: MATH 2030 or 2230.

## MATH 8386 - Probabilistic Operations Research Models (3)

This is a survey course of probabilistic operations research models and algorithms. Topics include Markov chains, queueing theory, inventory models, forecasting and simulation.

Prerequisite: MATH 2050.

## MATH 8400 - Dynamical Systems and Chaos (3)

Review of difference equations and differential equations, stability theory, periodic orbits, lyapunov exponents, fractals, chaos, state reconstruction from time series data.

Prerequisite: Permission from Instructor.

## MATH 8430 - Linear Programming (3)

This course includes a complete development of theoretical and computational aspects of linear programming. Basic theoretical foundations covered include polyhedra, convexity, linear inequalities and duality. Advanced topics such as decomposition and column generation are covered. Both simplex methods and interior point methods are included.

Prerequisite: MATH 4300/8306.

## MATH 8440 - Network Programming (3)

A presentation of network flow models and optimization algorithms. Topics include pure, generalized, integer, and constrained network problems, plus special cases of each, including transportation, assignment, shortest-path, transshipment, and multicommodity.
Prerequisite: MATH 4300/8306.

## MATH 8450 - Calculus of Variations (3)

Functionals, the Euler-Lagrange Equation, the Brachistochrone, minimum surface of revolution, isoperimetric problem, Fermat's Principle, Hamilton's Principle, least action, the vibrating string and membrane, max-min characterization of eigenvalues, further applications.
Prerequisite: MATH 3230/8235 and 3350/8355.

## MATH 8460 - Integer Programming (3)

Advanced study in mathematical programming with integer or mixed integer variables. Topics include integer programming, model creation, developing solution algorithms, and applications of integer programming.
Prerequisite: MATH 2030 or MATH 2230. Crosslisted as: CSCI 8460.

## MATH 8480 - Multi-agent Systems and Game Theory

 (3)This course covers advanced topics in the area of coordination of distributed agent-based systems with a focus on computational aspects of game theory. The main topics covered in this course include distributed constraint satisfaction, distributed constraint optimization, and competitive and cooperative game theory.

Prerequisite: CSCI 4450/8456: Introduction to Artificial Intelligence. Suggested background courses: CSCI 4480/8486: Introduction to Multi-agent/Multi-robot Systems; CSCI 8080: Design and Analysis of Algorithms. Crosslisted as: CSCI 8480.

## MATH 8490 - Applied Complex Variables (3)

Applications of complex variables to potential theory, Fourier and Laplace transforms, ordinary and partial differential equations, number theory, chaotic dynamical systems, etc.
Prerequisite: MATH 4270/8276.

## MATH 8500 - Advanced Numerical Methods I (3)

Topics covered in this course include error propagation, solutions of linear equations by various schemes, matrix norms and conditioning, and computation of eigenvalues and eigenvectors.

Prerequisite: MATH 1960 and MATH 2050. Familiarity with computer programming is assumed. Crosslisted as: CSCI 8500.

## MATH 8505 - Selected Topics in Mathematics (1-6)

This is a variable content course with selected topics in the mathematical sciences which may be of interest to students in other disciplines such as mathematics education, psychology and business. The course may be taken more than once for credit provided topics differ, with a maximum credit of nine hours. Mathematics majors may apply no more than three hours of MATH 3500 toward the minimum major requirements. MATH 8505 does not apply to M.A. or M.S. in mathematics.

Prerequisite: Permission of instructor. Crosslisted as: MATH 3500.

## MATH 8510 - Advanced Numerical Methods II (3)

This course provides advanced study of numerical solutions of partial differential equations.

Prerequisite: MATH 1970, MATH 2350, and either MATH 3300/8305 or MATH 4330/8336 or MATH 8500. Familiarity with computer programming is assumed. Crosslisted as: CSCI 8510.

## MATH 8520 - Advanced Topics in Operations Research (3)

Advanced treatment of a specific topic in the area of operations research not available in the regular curriculum. Topics, developed by individual faculty members, will reflect their special interests and expertise. The course may be repeated for credit as topics differ.

Prerequisite: MATH/CSCI 4300/8306 or permission of the instructor. Crosslisted as: CSCI 8520.

## MATH 8530 - Nonlinear Optimization with Nonlinear Integrals (3)

The course is focused on using a new mathematical aggregation tool, the nonlinear integral, in nonlinear optimizations and on its applications in information fusion and data mining, where a soft computing technique (genetic algorithms and/or neural networks) is adopted to search numerical optimal solutions approximately.

Prerequisite: MATH 1960 and MATH 4740. Preferred MATH 4300 and CIST 1400 or equivalent.

## MATH 8566 - Number Theory \& Cryptography (3)

This course covers topics in number theory and secure communication. From number theory: Factorization of Integers, Congruence Arithmetic, Primitive Roots, and Quadratic Residues and Reciprocity. In the area of secure communications: Hashing Functions, Character, Block Ciphers and their Cryptanalysis, Symmetric Key and Public-Key Cryptosystems.

Prerequisite: Math 2230 or MATH 2030. Crosslisted as: MATH 4560 and CSCI 8566 and CSCI 4560.

## MATH 8586 - Tensor Analysis (3)

Vector and Tensors: Review of Vector algebra and Vector calculus. The integral theorems of Green, Gauss and Stokes. Applications to geometry and physics. Tensor algebra. The metric tensor and Riemannian curvature. Christoffel symbols and the Roicci tensor. Tensor in Euclidean geometry. Geodesics, applications to geometry and mechanics.

Prerequisite: MATH 1970,2050, and 3350. Crosslisted as: MATH 4580.

## MATH 8620 - General Topology (3)

The concepts of MATH 4610/8616 are studied at an advanced level in conjunction with ordinal and cardinal numbers, open and closed maps, separation axioms and countable compactness.

Prerequisite: MATH 4610/8616 or permission of instructor.

## MATH 8645 - Modern Geometry (3)

Axiomatic systems, finite geometries, modern foundations of Euclidean geometry, hyperbolic and other nonEuclidean geometrics, projective geometry.

Prerequisite: MATH 2230 or MATH 2030, or equivalent mathematical maturity. Crosslisted as: MATH 3640.

MATH 8650 - Introduction to Probability Models (3)
An introduction to probability modeling including Poisson Processes, Markov chains, birth-death processes, queueing models and renewal theory. Applications will be an important part of the course.
Prerequisite: MATH 4740/8746 or MATH/CSCI 4760 or STAT 3800.

MATH 8656 - Transform Methods and Applications (3)
Laplace transform and the inversion integral. Fourier transform. Other transforms and special techniques. Applications to differential equations, boundary value problems of mathematical physics, and signal analysis.
Prerequisite: MATH 3350/8355 and MATH 4270/8276. Crosslisted as: MATH 4650.

## MATH 8670 - Topics in Probability and Statistics (3)

A variable topics course in probability and or statistics. Topics covered will include one or more of the following: reliability theory and applications in engineering and science, advanced probability and statistical models, theory of parametric estimation and applications, and advanced probability theory and application.
Prerequisite: MATH 4740/8740 or STAT 3800/8800 or permission from instructor.

## MATH 8746 - Introduction to Probability and Statistics I (3)

A mathematical introduction to probability theory including the properties of probability; probability distributions; expected values and moments; specific discrete and continuous distributions; and transformations of random variables.

Prerequisite: MATH 1970 and MATH 2030 or MATH 2230. Crosslisted as: MATH 4740.

## MATH 8756 - Introduction to Probability and Statistics II (3)

Theory and methods of statistical inference including estimators, statistical hypotheses, multivariate estimation, chi-square tests, analysis of variance, and statistical software.

Prerequisite: MATH 4740/8746. Crosslisted as: MATH 4750.

## MATH 8806 - Mathematics Education Capstone Course (3)

This capstone course for preservice and inservice teachers is intended to help connect the undergraduate mathematics curriculum to the secondary mathematics curriculum. Course topics include functions, equations, algebraic structures, congruence, trigonometry, and calculus. Topics are explored via strategies useful for studying mathematics called concept analysis and problem analysis.

Prerequisite: MATH 4030 (may be taken concurrently). Crosslisted as: MATH 4800.

## MATH 8850 - Advanced Automata and Formal

 Languages (3)A continuation of MATH/CSCI 4660/8666. The course will be an introduction to computational complexity. Topics that will be covered include space and time complexities of Turing Machines, deterministic versus non-deterministic machines, NP-Complete problems, alternating Turing machines, and concepts of reducibility.

Prerequisite: MATH/CSCI 4660/8666. Crosslisted as: CSCI 8850.

## MATH 8855 - History of Mathematics (3)

An overview of the historical development of mathematical concepts and methods. Brief biographies of major mathematicians, descriptions of the cultural context of selected major advances, and examples of the solution of problems using the knowledge and methods appropriate for each time period will be included.
Prerequisite: Students who enroll in this course should have completed MATH 1970 and MATH 2230 in order to have the minimum amount of mathematical background needed to appreciate the mathematical content of the course. Crosslisted as: MATH 3850.

## MATH 8880 - Advance Placement Institute: Calculus

 (3)A workshop for teachers planning to offer an advanced placement course in calculus. Objectives include increasing teacher competencies in single-variable calculus, discussion and study of AP calculus exams, implementations of AP courses in calculus, and development and presentation of projects for graduate credit. (This course will not count toward the M.A. or M.S. degrees in Mathematics.)

Prerequisite: Graduate in mathematics or mathematics education.

MATH 8970 - Independent Graduate Studies (1-3)
Under this number a graduate student may pursue studies in an area that is not normally available to him/her in a
formal course. The topics studied will be a graduate area in mathematics to be determined by the instructor.

Prerequisite: Permission of instructor and graduate classification.

MATH 8980 - Graduate Seminar (1-3)
A graduate seminar in mathematics.
MATH 8990-Thesis (1-6)
MATH 8355 - Differential Equations (3)
MATH 9110 - Advanced Topics in Applied Mathematics (3)

MATH 9230 - Theory of Function of Real Variables (3)
Real number system, convergence, continuity, bounded variation, differentiation, Lebesque-Stieltjes integration, abstract measure theory, the Lp spaces.

Prerequisite: MATH 4230/8236 and MATH 8240 or equivalent.

## MFAW - Master of Fine Arts Writing

## MFAW 8700-Residency Session (3)

A ten-day colloquium presenting lectures, classes, workshops, readings and individual conferences with seminar faculty. Taken 4 times, the Residency Session ends one seminar session and begins the next. The session affords students intensive contact with faculty and peers before returning to their writing projects.

Prerequisite: Admission to MFA in Writing program. Permission of the Program Director.

## MFAW 8710-Graduating Residency Session (0)

The Graduation Residency Session is the final residency for MFA students who have successfully completed their seminars and creative thesis. In the ten days of this residency, students will give a graduating lecture, "mentor" new students in their first residency, and give a reading from their thesis. A graduating ceremony will cap their activities during this session.

Prerequisite: Permission of Program Director.

## MFAW 8820 - Poetry Seminar (12)

An individualized course in poetry writing. Taken 4 times, the required seminar offers practical instruction in writing and criticism. Using distance technology, student and instructor work through independent projects designed to sharpen the student's writing skills. Each student will compose both original poetry and critical analyses of poetry by other writers preparatory to submitting an original book-length manuscript of publishable quality by the final semester.

Prerequisite: Permission of Program Director.

## MFAW 8830 - Fiction Seminar (12)

An individualized course in fiction writing. Taken four times, the seminar offers practical instruction in fiction writing and criticism. Using distance technology, student and instructor work through individualized writing projects designed to sharpen the student's writing skills to a professional edge. Students will compose both original fiction and critical analyses of fiction preparatory to submitting an original book-length manuscript of publishable quality by their final semester's work.

Prerequisite: Permission of Program Director.

## MFAW 8840 - Nonfiction Seminar (12)

An individualized course in nonfiction writing. Taken 4 times, the seminar offers practical instruction in writing and criticism. Students will compose both original nonfiction and critical analyses of nonfiction.
Prerequisite: Permission of Program Director.

## MFAW 8850 - Playwriting Seminar (12)

An individualized seminar in playwriting. Taken 4 times, the seminar offers practical instruction in playwriting and criticism. Using distance technologies, student and instructor work through independent projects designed to sharpen the student's writing and staging skills. Each student will compose both original scripts and critical analyses of plays by other playwrights preparatory to submitting at minimum a full-length playscript, a one-act playscript, and a ten-minute playscript by the final semester.

Prerequisite: Acceptance into the MFA in Writing Program and permission of the MFA program director.

MFAW 8860 - Poetry Seminar (12)

## MIB - International Business

## MIB 8210 - International Business Research Methods

 (3)This course will provide students with an understanding of international business research methodologies. They will develop a knowledge of electronic and other information resources available for international business research and competency in statistical methodologies appropriate in business research, and they will complete an international research project.

Prerequisite: Admission to MIB program and completion of MIB foundation requirements or permission.

## MIB 8220 - Legal and Ethical Issues in International

 Business (3)This course will cover many aspects of the international legal and ethical environment. Included will be the development of the common law and its acceptance or
rejection outside of the United States; comparison of world systems utilizing civil law, common law, Islamic law and Socialist law; and the social, legal and economic implications of ethical conduct in the international business arena.

Prerequisite: Admission to MIB program and completion of MIB foundation requirements or permission.

## MIB 8230 - International Economics (3)

This course will cover the foundations of international trade and international monetary theory. In addition, it will examine problems and prospects for transition to a market economy of East European and other less developed countries.

Prerequisite: Admission to MIB program and completion of MIB economics foundation courses or permission.

## MIB 8240 - International Managerial Accounting (3)

This course will cover many aspects of managerial accounting with particular application to international business operations. In addition, it will include other financial accounting issues important to the international business manager. Finally it will provide an important introduction to or review of many of the broader concepts of international business.

Prerequisite: Admission to MIB program and completion of MIB foundation courses or permission.

## MIB 8310 - International Financial Management (3)

This course will focus on multinational financial management as viewed and practiced by the multinational firm. Familiarity with specific aspects of international financial management such as foreign exchange exposure, multinational working capital management, international financial markets, and the foreign investment decision is essential to both managers and investors in a global market place.
Prerequisite: Completion of MIB Level I courses or permission.

## MIB 8320 - International Marketing (3)

International marketing is marketing under foreign or global environments. This class will emphasize the obtaining of knowledge about foreign markets and foreign environments, the collection of information on foreign markets and foreign environments, and the development of international marketing strategies.

Prerequisite: Completion of MIB Level I courses or permission.

## MIB 8330 - International Management (3)

This course will include topics in organizational behavior, organizational theory and human resource management within the context of multinational business. Special
attention is directed to developing a thorough understanding of the effects of culture on managerial decisions and practices in diverse national settings.

Prerequisite: Completion of MIB Level I courses or permission.

## MIB 8410 - International Strategic Management (3)

This courses requires students to integrate and employ knowledge acquired in all previous MIB course work. The concepts of strategic management and planning are developed and employed throughout the course. Specific attention is directed to the analyses of the business environment, business strategies, and the allocation of business resources.

Prerequisite: Completion of MIB Level I and Level II courses or permission.

## MUS - Music

## MUS 8006 - Special Studies in Music (1-3)

Seminars or workshops in Theory, History, Performance, and Music Education designed to meet specific interests and needs of students. Topics and number of credits for each specific offering will be announced during the prior semester.

Prerequisite: Graduate and permission of department. Crosslisted as: MUS 4000.

## MUS 8096 - Native American Music (3)

An overview of Native American music, musical performance and musical instruments with emphasis on participation and contemporary issues as well as historical perspective.

Prerequisite: Admission to Graduate Studies. Crosslisted as: MUS 4090.

## MUS 8160 - Performing Ensembles (1)

This is a one-credit course designed to provide high quality performance experience for the graduate level string, voice and instrumental students. In addition to the series concerts on campus, there are frequent appearances at professional music conferences and community/statewide events. Students will be exposed to a wide variety of music from appropriate style periods.
Prerequisite: Graduate standing, audition.
MUS 8406 - Advanced Composition (3)
Individualized applied study of the craft of musical composition in larger media and various styles.

Prerequisite: MUS 3450 and written permission.

## MUS 8446 - Music Since 1945 (3)

This course covers important developments in music in the United States and Europe since 1945. The purpose of the course is to familiarize students with the issues, techniques, composers and literature found in this period.

Prerequisite: Graduate standing or permission of the instructor.

## MUS 8456 - Advanced Orchestration (3)

This course will present students to advanced orchestration techniques with regard to style. Advanced orchestration techniques will be approached by scoring of selected excerpts with special attention to scoring for a full orchestra using advanced devices for the orchestra. The study of scores, especially those from Impressionism to the present, will be done. This course is intended for any and all students who wish to arrange or compose for orchestra, band, chorus or any other large ensemble.
Prerequisite: MUS 2420 and 2440 or permission of instructor, and graduate. Crosslisted as: MUS 4450.

MUS 8460 - Music Analysis for Performance (3)
A study of the primary analytical techniques developed by such important figures as Heinrich Schenker and Allen Forte. Music of many styles will be subject for analysis with focus on performance practice and application to conducting and interpretation.
Prerequisite: Graduate.

## MUS 8476-Counterpoint (3)

A study through analysis and composition of contrapuntal techniques in tonal music with an introduction to contrapuntal techniques in non-tonal and non-western music.

Prerequisite: Graduate and written permission. Crosslisted as: MUS 4470.

## MUS 8520 - Music Bibliography (3)

This course includes a study of music reference and research materials. Basic procedures and tools of investigative studies are treated, culminating in a research project.
Prerequisite: Graduate and permission.

## MUS 8536 - History of Opera (3)

This course will consist of significant music theater works in the Western world from 1600 to the present.
Prerequisite: Junior standing. Crosslisted as: MUS 4530.

## MUS 8546 - Renaissance Music Literature (3)

This course is intended for music majors who wish to undertake a comprehensive survey of music literature c. 1350-1600.

Prerequisite: MUS 2550, 2560, 2570 and graduate. Crosslisted as: MUS 4540.

## MUS $\mathbf{8 5 5 6}$ - Baroque Music Literature (3)

This course is intended for music majors who wish to undertake a comprehensive survey of music literature from c. 1600-1750.

Prerequisite: MUS 2550, 2560, 2570 and graduate. Crosslisted as: MUS 4550.

## MUS 8566 - Classical Music Literature (3)

This course is intended for music majors who wish to undertake a comprehensive survey of music literature from c. 1750-1815.

Prerequisite: MUS 2550, 2560, 2570 and graduate. Crosslisted as: MUS 4560.

## MUS 8576 - Romantic Music Literature (3)

This course is intended for music majors who wish to undertake a comprehensive survey of Music literature from c. 1815-1912.

Prerequisite: MUS 2550, 2560 and graduate. Crosslisted as: MUS 4570.

## MUS 8586 - Music from 1900-1945 (3)

This course is intended for music majors who wish to undertake a comprehensive survey of music literature from the post-romantic period to 1945 . The objective will be to provide the student with a broad overview with special attention given to composers and individual works which typify a style or form. Listening assignments will be an integral part of the course, and attendance at live, film and/or television performances will supplement the lectures, discussions and readings.

Prerequisite: MUS 2560. Crosslisted as: MUS 4580.
MUS 8606 - Piano Pedagogy (3)
This course is designed for piano majors and private music teachers in 'how to teach piano,' from the beginning stages through elementary and advanced levels. Procedures of instruction, basic principles of technique and materials used in teaching piano are covered.
Prerequisite: Permission of instructor. Crosslisted as: MUS 4600.

## MUS 8610-Organization and Administration in Music

 (3)Course is designed to acquaint students with the knowledge and concepts necessary for understanding and developing music education programs in the public schools and specific knowledge pertaining to policies and procedures for administering and supervising programs of music education.

## MUS 8616 - Voice Pedagogy (3)

This course is a study of the physiological and acoustical properties of the vocal mechanism and of the various techniques used in developing the 'singing' voice. Also, it will apply knowledge acquired about the voice through studio teaching and observations of other voice teachers.

Prerequisite: Junior voice or permission of undergraduate instructor. Graduate voice or permission of graduate instructor. Crosslisted as: MUS 4610.

## MUS 8620 - Seminar-Workshops in Music Education (1

 -3)Seminars and workshops in music and music education for the graduate student and in-service teacher.
Prerequisite: Permission.

## MUS 8630 - Research in Music Education (3)

A study of research techniques and literature in music and music education toward the objectives of reading and evaluating music education research and doing independent work in the area.

Prerequisite: Graduate and permission.

## MUS 8640 - Foundations of Music Education (3)

A study of psychological and historical backgrounds of music education through attention to relevant topics in the psychology of music and learning theory and through relevant readings in the history of music education as well as sociological trends in American schools.

Prerequisite: Graduate.

## MUS 8660 - Pedagogy of Theory (3)

Designed to introduce teachers to the techniques and problems of teaching music theory in elementary and secondary schools and colleges. This will be accomplished through a variety of methods to include a review of texts, teaching, and research.
Prerequisite: Graduate and permission of instructor.

## MUS 8676 - Piano Pedagogy II (3)

This course is designed for piano majors and private music teachers in 'how to teach piano' from the beginning steps through elementary and advanced levels. Procedures of instruction, basic principles of technique and materials used in teaching piano are covered.

Prerequisite: MUS 4600/8606. Crosslisted as: MUS 4670.

## MUS 8686 - Pedagogy of Multicultural Music (3)

This class will cover the two primary approaches to teaching multicultural music; the world music curriculum and the music in America curriculum. Pedagogical approaches to the case study and the cultural survey will be
included. Activities relating to performing and listening to multicultural music are also part of the course.

Prerequisite: Admission to Graduate Studies. Crosslisted as: MATH 4680.

## MUS 8700 - Conducting Practicum (3)

Private instruction in conducting and an intense study of the various disciplines in music and their relationship and application to the art of conducting. This course may be repeated for credit.

Prerequisite: Students with a choral emphasis, MUS 3640 and 8760. Students with an instrumental emphasis, MUS 3630 and 8630 .

## MUS 8716 - Acting for Music Theater (2)

This course is a study of theoretical and practical approaches essential to developing the 'singer/actor.'
Prerequisite: Music or drama major, permission of instructor. Crosslisted as: MUS 4710.

## MUS 8726 - Choral Literature (3)

A survey course in the study of significant choral genre of the various periods of musical composition from plain song to contemporary music. This course is intended for senior level students in the K-12 music education track and for students working on a masters degree in music education with emphasis in choral music.
Prerequisite: MUS 2570, 3640 and graduate. Crosslisted as: MUS 4720 .

## MUS 8736 - Keyboard Literature (3)

Survey and study of major piano repertoire from the Baroque keyboard composers to the 20th century composers. Included are keyboard concertos with orchestra.

Prerequisite: Permission of instructor. Crosslisted as: MUS 4730.

## MUS 8746 - Voice Literature (3)

This course is a study of the development of art song in Europe and America. Emphasis will be given to German and French song literature and their influences on English and American song.

Prerequisite: Junior voice or permission of undergraduate instructor. Graduate voice or permission of graduate instructor. Crosslisted as: MUS 4740.

## MUS 8750 - Advanced Instrumental Conducting (3)

Study of advanced conducting problems in band and orchestral literature and techniques for their solution.
Prerequisite: MUS 2600 and 3630 or 3640 or equivalent.

## MUS 8760 - Advanced Choral Conducting (3)

Advanced Choral Conducting is an in-depth study of the problems in and the techniques required for conducting the following: (a) Choral music of the plainsong era to the present; (b) Music for choruses and instrumentalists.
Prerequisite: MUS 2600 and 3640 or the equivalent.

## MUS 8970 - Treatise (3)

Preparation of a written project about some aspect of the student's recital. Should demonstrate competency in writing and research of appropriate aspects of music. To be taken concurrently or prior to MUS 8980.

Prerequisite: A written proposal for the written project must be approved by the appropriate departmental committee.

## MUS 8980-Recital (3-6)

This course involves the selection, preparation and public performance of a full recital in the student's major applied area. The recital should demonstrate the student's competency in a variety of styles and make advanced technical and interpretative demands. The course also includes a written project on the music performed at the recital. A full public recital and related written project as approved by the appropriate departmental committee is a graduation requirement for masters-level students in the performance track. Method of grading will be a designation of 'satisfactory' or 'unsatisfactory'.

Prerequisite: A written proposal for the recital and related written project must be approved by the appropriate departmental committee.

## MUS 8990 - Thesis (3)

The purpose of this course is to allow graduate students in Music Education (Option I) to develop a substantive thesis which employs and mirrors research or original thought of a quality and quantity appropriate to advanced work in music education. This course will be handled on an individual study basis with aid and consultation from a faculty thesis adviser and thesis committee. Method of grading will be a designation of 'satisfactory' or 'unsatisfactory'.

Prerequisite: Permission of Graduate Committee and twenty-four (24) hours of graduate course work completed.
MUS 8150A - Applied Music (3)
MUS 8150 - Applied Music (3)

## NSCI - Natural Sciences

## NSCI 8140 - Chemistry for High School Teachers (4)

This course is a study of the chemistry concepts essential to high school chemistry courses which meet the National Science Education Standards. Taking this course will help
high school chemistry teachers increase their understanding of chemistry to become more effective teachers of chemistry.

Prerequisite: Current employment as a high school teacher and instructor permission based on adequate chemistry background.

## PA - Public Administration

## PA 8010 - The Public Economy (3)

This course focuses on microeconomics and its application to policy and management in the public and non-profit sectors. The concept of efficiency is developed along with the goal of social equity to help determine the roles of the public, private, and non-profit sectors. Some key issues examined are: the balance between equity and efficiency, government intervention in the market, privatization of public servies, and cost benefit analysis.

## PA 8020 - Survey of Aviation Administration and Transportation Policy (3)

The purpose of the course is to acquaint students with advanced concepts of aviation administration and the implementation of aviation policy within the public sector and to identify key concepts and critical issues both domestic and international. The primary focus is to explore the various affects that have resulted from the formation and enactment of major aviation and transportation regulatory issues.

Crosslisted as: AVN 8020.

## PA 8030 - Internship in Public Administration (3)

Maximum of 3 hours to be granted upon completion of written report on internship. Internship in some government: national, state, local or nonprofit agency and in some instances public-oriented private agencies. Students will take course as Satisfactory/Unsatisfactoy. An additional 3 hours may be taken through PA 8040.

Prerequisite: Nine hours of MPA coursework and permission of school.

## PA 8040 - Internship in Public Administration (3)

Maximum of 3 hours to be granted upon completion of written report on internship. Internship in some government: national, state, local or nonprofit agency and in some instances public-oriented private agencies. Students will take the course as
Satisfactory/Unsatisfactory. An additional 3 hours may be taken through PA 8030.
Prerequisite: Nine hours of MPA course work and permission of the school.

## PA 8050 - Public Administration and Democracy (3)

The purpose of this course is to introduce the student to the art and science of public administration and to enable the student to develop the knowledge, skills and abilities requisite to the pursuit of graduate education in public administration.

## PA 8060 - Accounting and Financial Reporting for Public Managers (3)

This course focuses on the basic elements of governmental and non-profit accounting and their managerial implications. The course is directed toward students who have entered the Master's of Public Administration Program and who have little if any academic course work in accounting.

Prerequisite: PA 8010, PA 8050 and PA 8090 or permission of school.

## PA 8070 - Case Research (3)

The purpose of this course is to introduce the student to key concepts through the casewriting method of interactive learning. Issues within the public sector will be explored. The casewriting experience integrates key issues and concepts. This opportunity allows the student to explore specific topical areas through the case research method.

Crosslisted as: AVN 8070.

## PA 8090-Organization Theory and Behavior (3)

A study of the various approaches to understanding public organizations and people in them with special emphasis on the design, functioning and management of public agencies.

## PA 8100 - Seminar in Public Administration (3)

This course is an in-depth study of the relationships between the processes of government and the practice of public administration. Broad categories of political and administrative issues are examined to determine their impact on the administration of public and non-profit agencies.

Prerequisite: PA 8010, PA 8050, PA 8090 and permission of graduate adviser. Crosslisted as: AVN 8100.

## PA 8110 - Managing Information in the Public Sector (3)

This course is directed toward in-career and pre-career students in public administration who wish to acquire knowledge of issues in the management of information in the public sector and the basics of computing applications in the public sector. Its primary focus is on special issues in the management of information.
Prerequisite: PA 8010, PA 8050, and PA 8090; or permission of school.

## PA 8120 - Research Methods for Public Administration (3)

This course is designed to assist students develop their skills in quantitative analysis of information relevant to public affairs. The course introduces students to fundamentals of research designs, strategies of data collection and basic statistical analysis.

Crosslisted as: AVN 8120.

## PA 8130 - Computer Applications in Public Affairs (3)

This course will provide doctoral and advanced master's level students in public affairs with a substantive understanding of how computers may be utilized in research efforts.

Prerequisite: PA 8010, PA 8050, PA 8090, and PA 8110.
PA 8206 - Community Organizing \& Social Change (3)
This course will focus on various theories and applications of organizing communities and neighborhoods to effect change. Of particular interest is the role of engaging citizens in improving their communities.

Prerequisite: Permission of instructor. Crosslisted as: PA 4200.

## PA 8300 - Policy Design and Implementation (3)

This course examines the formulation, adoption, implementation and evaluation of public policy. Important topics include the basic features of American government, the causes and determinants of public policies, the dynamics of decision-making in the public sector, the obstacles to 'successful' public programs, and the criteria for the assessment of a public program's impact. Special emphasis is given to the role public managers play within the policy process.

Prerequisite: PA 8010, 8050, and 8090.

## PA 8320 - Public Policy Evaluation (3)

This course is designed to have the students understand the role of evaluation in the policy process, to demonstrate how to conduct and implement evaluations of public programs, to illustrate the procedures for presenting an evaluation report to public officials and citizens, to introduce operational issues and problems associated with management of an office of policy evaluation, and to insure the exploration of conflicts and limitations inherent to public policy evaluation.
Prerequisite: PA 8010, PA 8050, PA 8090,PA 8120 and completion of at least 24 hours in the MPA program.

## PA 8330 - Seminar in Policy Analysis (3)

Application of analytical techniques to the assessment of alternative courses of public action and the development and design of public programs; utilization and impact of expert analysis by public officials and political groups;
impact and role of technical analysis in a democracy; management of policy analysis units within government.

Prerequisite: PA 8050 and PA 8120.
PA 8400 - Public Budgeting (3)
The purpose of the course is to familiarize public administration students with the basic characteristics and features of public budgets and enable them to deal competently with them.
Prerequisite: PA 8010, PA 8050, or permission of school.

## PA 8410 - Public Human Resource Management (3)

A study of the personnel process in American governmental administration. The processes and problems of recruiting, structuring and operating public bureaucracies are examined as well as problems in personnel leadership, neutrality, accountability and performance.
Prerequisite: PA 8050 or permission of school.

## PA 8420 - Public Works Management (3)

This course is designed to develop an understanding of the profession of public works management and its relationship with urban service delivery. Students will learn substantive specialty areas of public works, as well as management techniques to improve service delivery efficiency.

Prerequisite: PA 8050.

## PA 8440 - Organization Develop. \& Planned Change in the Public Sector (3)

This course provides students with the theories and skills necessary to manage organizational change in the public sector. To accomplish this will require that the student become versed in the strategies of organizational development (OD) and planning in the public sector while at the same time mastering intervention techniques.
Prerequisite: PA 8010, PA 8050, PA 8090, PA 8120 and completion of at least 24 hours in the MPA.

## PA 8450 - Seminar in Advanced Management Analysis in Public Agencies (3)

A study of theory and method related to analysis of problems of organization and workflow in public agencies. The course includes problem analysis, field study methods, design of improved methods, selecting alternatives and developing decision packages.
Prerequisite: PA 8010, PA 8050, PA 8090, PA 8120 and completion of at least 24 hours in the MPA program.

## PA 8460 - Seminar in Public Personnel Administration (3)

This course focuses on the principal considerations affecting the selection and utilization of personnel by government agencies. The emphasis is less in terms of description of processes than in terms of identifying and exploring solutions to problems.

Prerequisite: PA 8010, PA 8090, PA 8410 or permission of school.

## PA 8470 - Administrative Ethics and Leadership (3)

Ethical action and effective leadership are especially important in public service and they are closely related. This course introduces students to concepts from public sector ethics and from leadership theory. Emphasis is placed on decision-making processes, relationships between public and nonprofit sector professionals and elected officials and citizens, and the role of the career public service professional in a democratic society.

Prerequisite: PA 8050 or permission of school.

## PA 8480 - Seminar in Public Financial Administration

 (3)The study of public finance administration policy and techniques areas. Emphasis is placed on the technical aspects of public finance administration with particular emphasis on the purposes, processes and issues associated with particular techniques or technique areas.
Prerequisite: PA 8010 and PA 8050; or permission of school. Crosslisted as: AVN 8480.

PA 8496 - Public Sector Labor Relations (3)
This course deals with the origin, characteristics and implications of public sector employee unions and how they relate to public sector personnel practices.

Prerequisite: PA 8010 and PA 8090 or permission of school. Crosslisted as: PA 4490.

## PA 8500 - Issues in Public-Private Sector Cooperation

 (3)This course introduces students to the organization and processes, as well as the tools and techniques, of publicprivate sector cooperation. The objective of such a course is to familiarize students with the concepts and skills needed to develop and administer joint activities between the public and private sectors. Such cooperative activies have become an important aspect of public administration in recent years.
Prerequisite: PA 8010, PA 8050, \& PA 8090 or permission of school.

## PA 8516 - Long-Term Care Administration (3)

An investigation of the broad range of policy issues, theoretical concerns and practical management strategies influencing the design, organization and delivery of longterm care services.

Prerequisite: Permission of instructor and PA 8050, PA 8090 or permission of school. Crosslisted as: GERO 4510 and PA 4510 and GERO 8516.

## PA 8520 - Seminar in Grant Writing (3)

This course explores the grant-writing process from initial conceptualization through submission and award to final report. The purposes of the course are to provide graduate students with the expertise and tools needed to fund their own research, to provide effective grant-writing assistance to faculty mentors and other colleagues, and to compete more effectively in the job market and/or for acceptance into doctoral and post-doctoral programs.
Prerequisite: PA 8010, PA 8050, and PA 8090.

## PA 8530 - Strategic Planning \& Mgmt in Public \& NonProfit Organiz. (3)

This course is designed to have the student understand the relationship between public policy, agency strategy, agency operation and the delivery of public services to citizens. It will provide the student an opportunity to devise a model strategy for a public agency or jurisdiction, introduce a variety of systems for managing particular tasks within the public sector and give the student the opportunity to construct operating procedures for a specific public program or subprogram.
Prerequisite: PA 8010, PA 8050, PA 8090, and PA 8120 and completion of at least 24 hours in the MPA program.

PA 8550 - Introduction to the Non-Profit Sector (3)
This course focuses on the contribution and importance of philanthropy, volunteerism and nonprofit organizations in society. Includes the differentiation between both public and private nonprofit organizations and the for profit sector. Management issues regarding nonprofit agencies is introduced.

Prerequisite: Graduate standing and permission of adviser and PA 8010, PA 8090 or permission of school.

## PA 8566 - Intergovernmental Management (3)

This course is directed at those who wish to improve their knowledge and understanding of intergovernmental relations as it impacts policy and administration in the United States. The course will look at history and theoretical underpinnings of intergovernmental relations, the different elements of these relationships and review specific management arenas that are affected by these relationships.

Prerequisite: PA 8010, PA 8050, and PA 8090; or permission of school. Crosslisted as: PA 4560.

## PA 8580 - Management and Administration of Non Profit Organizations (3)

General content course focusing on management and administrative issues relating to non profit organizations. Administrative structure and other subjects related to the difference between non profit and for profit organizations will be addressed. Subjects will include constituencies, boards, strategic planning, marketing, financial management, human resources, volunteer management, and resource development.

Prerequisite: Graduate standing and permission of adviser; PA 8050; or permission of school.

## PA 8600 - Administrative Law (3)

A review of the principal elements of the role and character of legal processes in government administration, including delegation of powers, legal forms of administrative action, liability of government units and officers and judicial review of administrative action.

Prerequisite: PA 8050.

## PA 8676 - Programs and Services for the Elderly (3)

This course is provided to give the student a historical overview of programs for the elderly; examine the national policy process as it relates to the older American; and review the principles and practices relative to the existing national programs for the aged.

Prerequisite: This is an upper division course. There are no other prerequisites. Crosslisted as: GERO 8676.

## PA 8710 - Fund Raising in Public and Non-Profit Organizations (3)

The purpose of this course is to introduce students to a variety of fund raising methods, provide the context in which these methods might be used, and provide an understanding of how fund raising operates within public and not-for-profit organizations.

Prerequisite: Graduate standing and permission of instructor, PA 8010, and PA 8090; or permission of school.

## PA 8720 - Health Care Finance (3)

Health care finance represents an analysis of health care concepts, issues and trends from a health care and an organizational perspective. Application of specific principles, concepts, and techniques of financial management to health care systems will be addressed. Examination of the role and responsibilities of health care administrators in relation to financial management will also be explored.

Prerequisite: PA 8120 OR PSM 806 OR PSM 820.

## PA 8730 - Administration of Health Care Systems (3)

This course is designed to familiarize students with the structure and administration of health services systems in the United States. It addresses quality, access and cost of the health services delivery, personnel and funding resources, traditional and alternative health services delivery settings, and forces that shape the current and future health care sector.

Prerequisite: PA 8050 or permission of school.

## PA 8740 - Health Care Policy (3)

This course helps students understand major health care policy making and related issues. It focuses on the history/background; physical, social, and economic environment; policy process; and political marketplace of contempory U.S. health care policies. Topics include health care reform, cost containment, indigent health care and urban vs. rural health care. A health care background is helpful, but not required.

Prerequisite: Graduate standing.

## PA 8760 - The U.S. Health Care System (3)

Overview of the U.S. health and medical care delivery system. Topics are covered from a historical, economic, sociological, and policy perspective and include the following: social values in health care; need, use, and demand for services; providers of health systems; public and private payment systems; alternative delivery systems; and models from other countries.

Prerequisite: Graduate Standing.

## PA 8810 - Seminar in Metropolitan Planning (3)

An overview of the present status of planning in metropolitan areas with special emphasis on structure of planning departments, comprehensive plans and problems of annexation.

Prerequisite: PA 8050 or permission of instructor or permission of school.

## PA 8826 - Introduction to Environmental Law \& Regulations (3)

Seminar on environmental law and regulations. Addresses federal regulations, implementing instructions, legal principles, and requirements. The major federal environmental laws, air and water quality, solid and hazardous waste, and pollution prevention and remediation are discussed.

Prerequisite: Graduate standing and permission by the environmental advisory board; PA 8050; or permission of the school. Crosslisted as: BIOL 4820 and BIOL 8826 and GEOG 4820 and GEOG 8826 and PA 4820 and ENVN 4820.

## PA 8896 - Critical Issues in Aviation Administration (3)

A study of timely as well as timeless issues in aviation. Topics will cover dynamic critical issues in the field of aviation. These issues emphasize recent and significant changes and evolutionary developments found in various components of the aviation industry. Students will need access to and a working knowledge of the World Wide Web.

Crosslisted as: PA 4890 and AVN 4890 and AVN 8896.
PA 8906 - Special Topics (1-3)
A variable content course with Public Administration and Urban Studies topics selected in accordance with student and faculty interest. Possible topics include urban homesteading, administrative federalism and economic development and the public sector.

Prerequisite: PA 8050 or permission of the school. Crosslisted as: PA 4900.

## PA 8920 - Readings in Public Administration (1-3)

Specially planned readings in public administration for the graduate student who encounters scheduling problems in the completion of his degree program, or who has special preparatory needs and who is adjudged by the department to be capable of pursuing a highly independent course of study.

Prerequisite: PA 8010, PA 8050, PA 8090, PA 8120, and permission of the school.

## PA 8930 - Negotiation Skills in General Management

 (3)This course will focus on the theories of negotiation and the negotiating process.
Prerequisite: PA 8010, PA 8050, PA 8090, or permission of the school.

PA 8940 - Research in Public Administration (1-3)
The course is intended for advanced graduate students in public administration. It is especially suited for those incareer students who have had their internships waived and who might profit more by in-depth research on a problem of public administration rather than additional classroom courses.

Prerequisite: PA 8010, PA 8050, PA 8090, PA 8120, and permission of the school.

## PA 8970 - Introduction to Qualitative Research (3)

The purpose of this course is to provide an introduction to qualitative research and its application in public administration. Students will learn the philosophic assumptions underlying qualitative research methods, especially as they differ from quantitative methods. Students will study the process of qualitative inquiry-including the formulation of research questions, collection
and analysis of data, various strategies (e.g. case studies and ethnographies), verification, and the place of theory and literature in the research process.

Prerequisite: Admission to the doctoral program or permission of the instructor; PA 8050, or permission of the school.

## PA 8980 - Thesis (1-6)

A research project, designed and executed under the supervision of the chair and members of the graduate student's Thesis Advisory Committee. In this project, the student will develop and perfect a number of skills including the ability to design, conduct, analyze, and report the results in writing (i.e., thesis) of an original, independent scientific investigation. The project plan must be approved by the student's Thesis Advisory Committee.

Prerequisite: Graduate major in Public Administration and approval of Thesis Advisory Committee. Crosslisted as: AVN 8980.

## PA 8990 - Capstone Project in Public Administration (3)

The purpose of this course is to allow students to integrate their graduate public administration course experiences into a project that reflects the cumulative knowledge gained from their class instruction. This class is intended only for students who are completing the master of public administration degree. The course can be taken as an alternative to comprehensive exams.

Prerequisite: Completion of at least 30 hours im the M.P.A. program and school permission. Crosslisted as: PA 4990.

PA 8706 - Marketing in Public \& Non-Profit Aviation Organizations (3)

## PA 8750 - The U.S. Health Care System

PA 8996 - Special Topics: Nonprofit Finance (3)
PA 9000 - Foundations of Public Administration (3)
This course is designed as a doctoral seminar that surveys the development of public administration from its earliest antecedents to the present day, taking both a historical and topical approach.

Prerequisite: Admission into the doctoral program or permission.

PA 9080 - Advanced Statistical Applications (3)
This is a required course which will provide the student with fundamentals of modern statistical techniques used in criminal justice and public affairs research.

Prerequisite: Admission to PhD program in Criminology and Criminal Justice; or UNO graduate student and

CRCJ8950 or PA8950 and instructor permission. Crosslisted as: CRCJ 9080 and CJUS 9080.

## PA 9200 - Theories of the Policy Process (3)

Proseminar in public policy with emphasis on the development and application of theories of the formulation, adoption, and implementation of public policy.

Prerequisite: Completion of a Master's degree in Public Administration or a related field, and permission of the instructor.

## PA 9300-Knowledge Development \& Use in the Public Service Profession (3)

This course will examine current issues in knowledge, development and use in the public service professions. Emphasis is placed on understanding various systematic research to effect social change.

Prerequisite: Admission to doctoral program or permission of the instructor.

## PA 9400 - The Environment of Public Administration (3)

The purpose of this course is to enable the doctoral student to understand the role and responsibility of public administration in the context of the broader political economy.

Prerequisite: Admission to the doctoral program or permission of the instructor.

## PA 9420 - Organizational Dynamics (3)

This course is designed as a doctoral seminar which expands the student's knowledge of organizations and the people in them. It will equip the student to understand and develop the behavior necessary for success at upper levels of administration in the public sector.

Prerequisite: Admission to the doctoral program or permission of the instructor.

## PA 9600 - Seminar in Advanced Management Theory

 (3)This course examines how recent advances in management theory may be incorporated into the practice of public administration.

Prerequisite: Admission to doctoral program, PA 8090, or permission of instructor.

PA 9700-Public Budgeting and Financial Theory (3)
This seminar is focused on theoretical issues in public budgeting and governmental finance. The aim of the seminar is for the student to understand the central issues in public budgeting and finance, and the place of this field of study within public administration.

Prerequisite: Admission to doctoral program or permission of the instructor.

## PA 9800 - Advanced Research Design (3)

This is a required course which will expose students to advanced topics in research methods in preparation for writing their doctoral dissertation. It will also apply advanced methodological techniques to problems in the field.

Prerequisite: Admission to the doctoral program.

## PA 9900 - Advanced Topics in Public Administration

 (3)This course provides a format for exploration of topics of interest to advanced students in public administration. Topics covered will change periodically in keeping with the interests of faculty and students.

Prerequisite: Admission to PhD program in Public Administration or permission of instructor. Crosslisted as: AVN 9900.

## PA 9920 - Teaching and Professional Skills Workshop (1)

The workshop offers training for a career in higher education. Instruction and practice in teaching includes creating and presenting lecture material, facilitating discussion, constructing syllabi, and related matters. Instruction in professional skills includes topics such as interviewing for positions, writing and publishing, and the tenure process.

Prerequisite: Admission to $\mathrm{Ph} . \mathrm{D}$. program or permission of the instructor.

## PA 9950 - Quantitative Methods in Public Administration (3)

This course is designed to prepare the student to understand and apply advanced statistical methods needed in the design and analysis of public administration investigations. The major topics to be covered include research designs, nonexperimental research and specialized research designs, multiple linear regression, analysis of covariance, and logistic regression.

Prerequisite: CJUS 8030 or equivalent, PA 8050, or permission of the school.

## PA 9960-Qualitative Research Methods (3)

This course is a doctoral seminar in the methods and practice of qualitative research. Advanced research design techniques, validity, mixed methodology, and qualitative research tools common to the practice of public administration are presented.

Prerequisite: Admission to the doctoral program in public administration or permission of the instructor.

## PA 9970 - Directed Research in Public Administration

 (3)This course offers a structure for doctoral students to conduct advanced research in their chosen area of specialization.
Prerequisite: Admission to Ph.D. program in Public Administration or permission of the instructor. Crosslisted as: AVN 9970.

## PA 9980 - Directed Readings in Public Administration (1-6)

This course is designed to provide the advanced graduate student with the opportunity to do extended readings on a specialized public administration topic.
Prerequisite: Admission to the Ph.D. program in public administration and permission of the instructor. Crosslisted as: AVN 9980.

## PA 9990-Dissertation (1-20)

The dissertation is an original research project conducted and written under the direction of a faculty dissertation committee. The dissertation provides the student with an opportunity to do original research that contributes to advancing the body of knowledge in public administration.
Prerequisite: Admission to the Ph.D. program in public administration. Admission to candidacy for the Ph.D. degree. Prior to enrolling for dissertation hours, the student must have permission from the chair of the supervisory committee.

## PE - Physical Education

## PE 8016 - Laboratory Methods in Exercise Science (6)

This course will provide candidates an opportunity to achieve competency in operating various pieces of equipment typically used in biomechanics and exercise physiology laboratories. The candidate will gain experience in interpreting the results of the tests administered and writing exercise prescriptions based upon those results. Candidates must have current CPR certification.

Prerequisite: The prerequisites are PE 4630, PE 4940 and permission of instructor. Crosslisted as: PE 4010.

## PE 8040 - Applied Statistics in Physical Education (3)

This course will be a study in the statistical methods commonly used in descriptive and experimental research in physical education and exercise science. Application, particularly regarding the purpose, selection, and interpretation of statistical procedures will be emphasized.
Prerequisite: HPER 8030.

## PE 8076 - Optimizing Sports Performance (3)

The course is designed for coaches, athletes and physically active people, and allied health professionals. Course content emphasizes integration of several disciplines in sports medicine aimed at preparing one for optimal sports performance. Topics include peaking, detraining, overuse injury, efficiency, special foods and nutritional requirements, genetics and trainability, and designing of multi-year training schedules.
Prerequisite: PE 2880, 4630 and 4940. Crosslisted as: PE 4070.

## PE 8120 - Current Topics in Weight Management (3)

This course will focus on current issues related to weight management. Candidates will review the guidelines for physical activity and nutrition, apply them to current reading material sold in book stores, and develop a best practice for weight management using what they have learned.

Prerequisite: Instructor approval.

## PE 8130 - Implementing Physical Activity in Diverse Populations (3)

This course will focus on information necessary to assess, design, implement, and evaluate the need for and effectiveness of physical activity interventions in diverse populations. These populations will include: African American, Native American, Hispanic, Asian American, Pacific Islanders, and Caucasian. Additionally, candidates will complete a health and physical activity, service learning project in which they will work with diverse populations in the Omaha community.
Prerequisite: PE 8905 or HED 8600.

## PE 8140 - Physical Activity Measurement (3)

This course will focus on the measurement of physical activity using a variety of tools including: questionnaires, pedometers, heart rate monitors, and accelerometers. Issues involving measurement including selecting the appropriate measurement for specific populations and settings as well as reliability and validity will be discussed.

Prerequisite: Instructor Approval.

## PE 8176 - Motor Assessment and Prescription (3)

An in-depth survey of motor and fitness assessment instruments for use with pre-school, elementary, and secondary school students. The use of test scores for diagnosis and prescription of physical education activities for special populations will be addressed. This course will enhance the skills of the teacher to orchestrate the learning environment for students with special needs.
Prerequisite: PE 4150. Crosslisted as: PE 4170.

## PE 8186 - Practicum in Physical Education for the Disabled Child (3)

This course is designed as a practicum with theoretical and practical experience in addressing the motor needs of young disabled children in a physical education setting. This course will enhance the skills of the teacher to orchestrate the learning environment for students with special needs.

Prerequisite: PE 4170/8176 and permission of instructor. Crosslisted as: PE 4180.

## PE 8206 - Planning Worksite Wellness Programs (3)

This course will focus on the planning of quality worksite wellness programs utilizing standards established by the Association for Worksite Health Promotion. Steps in the planning process such as needs assessment, strategic planning, implementation, and evaluation will be taught with special application to the worksite. Critical issues involving worksite programs also will be addressed such as upper management support, program standards, corporate culture, competencies for worksite health promotion professionals, economic benefits, behavioral theories, legal issues, and the integration of worksite wellness programs and health care.

Prerequisite: None. Crosslisted as: PE 4200.

## PE 8240 - Sport in American Culture (3)

Sport in American culture is a study of sport from a theoretical perspective. The relationship between sport and sub-cultures (to include disadvantaged American cultures), economics, global influences, and technology will be analyzed.
Prerequisite: None.

## PE 8266 - Including Individuals w/Disabilities in Physical Education (3)

This course is for physical education, health education, special education and therapeutic recreation candidates interested in the inclusion of children with disabilities in physical education environments.

Prerequisite: PE 3060 or PE 4000; PE 4150. Crosslisted as: PE 4260.

## PE 8280 - Curriculum in Physical Education (3)

A study of the foundations for curriculum development. Special consideration is given to curriculum change, curriculum patterns and programs in physical education which will meet a culturally diverse, global society.

Prerequisite: None.

## PE 8310 - Athletic Training Techniques (3)

Overview course including basic components of the athletic training profession including the prevention,
recognition, evaluation and immediate care of athletic injuries. Medical terminology, emergency procedures, tissue healing, taping procedures, and professional considerations also will be covered. Includes clinical experience with emphasis on introductory skills, techniques, and training room management.

Prerequisite: Admission to the Master of Arts in Athletic Training.

## PE 8316 - Lower Extremity Evaluation (4)

This course is designed to provide the candidate with knowledge and skill in the area of advanced athletic injury assessment. The candidate will be exposed to current methodology in the field of assessment, physiological response of the human body to injury, and immediate care of the injured area. The candidate will receive practical experience in the management of athletic injuries. This course will focus on the low back, hip and lower extremities.

Prerequisite: PE 1010 Introduction to Athletic Training PE 2700 Fundamentals of Athletic Training PE 2880 Physiology \& Anatomy Admission into the Athletic Training Education Program. Crosslisted as: PE 4310.

## PE 8326 - Upper Extremity Evaluation (4)

This course is designed to provide the candidate with knowledge and skill in the area of advanced athletic injury assessment. The candidate will be exposed to current methodology in the field of assessment, physiological response of the human body to injury and immediate care of the injured area. The candidate will receive practical experience in the management of athletic injuries. This course will focus on the head, neck and upper extremities.

Prerequisite: Written permission required. Crosslisted as: PE 4320.

## PE 8336 - Athletic Therapeutic Modalities (4)

This course will cover the theory, physiology and application of physical agents used in the treatment of athletic injuries. Candidates will receive clinical experience in the use of these physical agents in supervised clinical settings on the UNOmaha campus.

Prerequisite: PE 8316 or PE 8326 or permission of instructor. Crosslisted as: PE 4330.

## PE 8346 - Rehabilitation Techniques in Athletic Training (3)

The use of basic theories and principles of athletic injury rehabilitation including therapeutic exercise and the use of physical agents. The development of rehabilitation programs including hands-on practical application.

Prerequisite: Written permission required. Crosslisted as: PE 4340.

## PE 8356 - Organization and Administration of Athletic Training (3)

Administration of athletic training programs including the use of records and forms, budgets, facility design and legal concerns.

Prerequisite: Written permission required. Crosslisted as: PE 4350.

## PE 8360 - Advanced Orthopedic \& Medical Aspects of Athletic Training (3)

This course will enhance the candidate's knowledge of orthopedic aspects and general medical conditions of the athlete. Involves lecture, directed observation, experiential learning, literature review and hands-on experience. Local medical professionals will be providing instruction and supervision within their specialties. The candidate will be exposed to advanced evaluation and treatment skills, including imaging techniques, surgical procedures, rehabilitiation and athletic training management.

Prerequisite: PE 8316 and PE 8326.

## PE 8370 - Analyzing Physical Education Teaching and Sport Instruction (3)

This course will examine the teaching and coaching in physical education and sport. It will identify assessment techniques utilized in teaching and coaching behavior research as well as typical prescriptions in an effort to improve onel<br>'s performance.
Prerequisite: Graduate standing.

## PE 8400 - Motor Learning (3)

Discussion and analysis of scientific principles related to the learning of motor skills; review related literature and research in motor learning. The focus of the course is on recent theories of how movements are acquired and performed, and on factors that have implications for motor learning throughout the life span.

Prerequisite: PE 2800 (Motor Behavior) or consent of the supervising Professor.

## PE 8410 - Motor Control (3)

The focus of the course is to explore the study of the conditions and factors that influence the control and performance of motor skills from both neurophysiological and psychobiological perspectives.

Prerequisite: PE 2800 (Motor Behavior) or permission of instructor.

## PE 8420 - Motor Development (3)

This course focuses on the study of motor development, the processes that underlie this development and the factors that influence it. Students will gain an understanding of the major theoretical perspectives of
motor development across the life span with special emphasis given in child development.

Prerequisite: PE 2800 (Motor Behavior) or permission of instructor.

## PE 8450 - Advanced Biomechanics (3)

An investigation of the biomechanical basis of motor performance. Includes a mechanical analysis of motor skills and fundamental movement patterns and an examination of techniques for collecting biomechanical data.

Prerequisite: PE 4630 Biomechanics or equivalent PE 2880 Basic Human Physiology and Anatomy.

## PE 8460 - Occupational Biomechanics (3)

The course will address the biomechanical basis of human performance in work places and provide candidates with information in the application of biomechanics, engineering for designing industrial tools, equipment, products, and jobs that take into consideration human physical capabilities and limitations.

Prerequisite: PE 4630 Biomechanics or equivalent PE 2880 Basic Human Physiology and Anatomy.

## PE 8506 - Behavioral Aspects of Coaching Athletes (3)

This course is designed to provide the physical education teacher and athletic coach with an overview of the behavioral aspects of coaching athletes. The course will provide information which will enable the coach to enhance as well as orchestrate performance of elementary, junior high, senior high, college, and post-college athletes.

Prerequisite: Graduate. Crosslisted as: PE 4500.

## PE 8800 - Risk Management for Health Fitness Professionals (3)

A study of risk management for health fitness professionals with a focus on minimizing liability exposures for health fitness facilities and their personnel. Principles of risk management such as the assessment of liability exposures, the development and implementation of risk management strategies, and the evaluation of these strategies will be explored as well as the law as it pertains to health fitness liability. Candidates will develop the knowledge and skill to manage high quality health fitness programs in various settings.
Prerequisite: PE 4010/8016.

## PE 8865 - Scientific Aspects of Strength Development

 (3)This course is designed to explore the nature of muscular strength development, to investigate the physiological basis of physical conditioning, and to provide teachers, coaches and trainers with practical experience in designing
specialized conditioning programs for a variety of sports and cultures.

Prerequisite: None. Crosslisted as: PE 3860.

## PE 8900 - Management \& Leadership Skills for Fitness Wellness Managers (3)

This course is a study of management and leadership skills necessary for the successful management of fitness and wellness facilities and programs. Candidates will develop knowledge and practical skills in the areas of personnel and financial management, marketing, and operating policies procedures as well as develop a personal leadership philosophy based on sound principles of leaders.

Prerequisite: PE 4010/8016 Laboratory Methods in Exercise Science or ACSM Health Fitness Certification.

## PE 8905 - Motivation for Physical Activity (3)

The central purpose of this course is to examine the psychological basic of exercise and physical activity. The majority of the course will focus on traditional theories/principles of psychology as they relate to exercise. Emphasis is placed on understanding the motives underlying involvement in exercise and physical activity and the psychological benefits derived from acute and chronic involvement in an exercise program. Throughout the course, consideration will be given to theoretical models, research findings, and practical application of the concepts to a variety of performance settings.

Prerequisite: None. Crosslisted as: PE 3900.

## PE 8910 - Internship in Exercise Science (3)

This course is an off-campus, supervised, educational work experience of at least 150 clock hours at an approved worksite offering programs and experiences in fitness development or health promotion. Candidates must have current CPR certification.

Prerequisite: The prerequisites for this course include 90 hours completed, 2.5 GPA, PE 4900 and permission of instructor.

## PE 8936 - Measurement and Evaluation of Physical Education (3)

This course is designed to preset the theory and application of measurement and evaluation techniques commonly used in physical education and exercise science. An emphasis will be placed on the appropriate test selection, implementation, and the interpretation of the results with fundamental statistical procedures.

Prerequisite: PE 4940 and junior. Crosslisted as: PE 4930.

## PE 8946 - Physiology of Exercise (3)

A study of the major physiological systems of the human body and their acute and chronic responses to exercise.

Includes application of physiological concepts to physical training and conditioning.

Prerequisite: PE 2880 or BIOL 2740 and BIOL 2840 or equivalent. Crosslisted as: PE 4940.

## PE 8950 - Advanced Exercise Physiology (3)

A detailed analysis of selected topics including acute and chronic effects of exercise on metabolic, pulmonary, and cardiovascular function; and sports nutrition. Current research findings and methodology will be emphasized.

Prerequisite: PE 4940 or equivalent.

## PE 8966 - Topics in Sports Medicine (3)

This course covers selected topics regarding the science and medicine of sports participation. Some areas to be covered include the medical supervision of the athlete, special populations, conditioning, environmental concerns and sports nutrition.
Prerequisite: PE 4630, PE 4940/8946. Crosslisted as: PE 4960.

## PE 9810 - Higher Education Teaching Seminar (3)

The seminar is designed to prepare students for entry into a higher education teaching career. This seminar requires doctoral students to teach an undergraduate or graduate lecture course relevant to their field of preparation. The seminar includes an examination of the roles, responsibilities, and privileges associated with teaching in higher education.

Prerequisite: Admittance to the UNO Doctoral Program in Exercise Science and successful completion of 24 hours of doctoral coursework and approval from advisor.

## PE 9820 - Service Experience in Higher Education (3)

This seminar will allow students the opportunity to gain valuable knowledge of the service expectations of faculty in higher education settings. The seminar will focus on service opportunities within the university, within the profession and within the community. Participants in the seminar will complete appropriate service activities.
Prerequisite: Admittance to the UNO Doctoral program in Exercise Science, successful completion of 24 hours of doctoral coursework, and approval from advisor.

## PE 9910-Graduate Seminar (1-12)

The major goal of this course is to teach the graduate student how to write manuscripts/grants and be an effective academician with strong ethics. The outcome of this course is for the student to produce a manuscript based on data acquired in the laboratory from the ideas developed in the seminar or submit a grant that will support the research ideas developed in at least one semester. The material covered is intended to equip students with the
skills necessary to be successful in their academic careers with emphasis given on writing scientific papers.

Prerequisite: Admission into the PhD program.

## PE 9990 - Dissertation (1-15)

The course provides doctoral candidates in Exercise Science with a process to complete a dissertation research plan. The course learning activities will focus on the completion of a candidates dissertation. The course is designed to allow advanced doctoral candidates to demonstrate technical mastery of the discipline and to advance knowledge by completing an investigation.

Prerequisite: Admittance to the UNO Doctoral Program in Exercise Science, successful completion of doctoral coursework and doctoral comprehensive examinations, approval of the chair of the dissertation supervisory committee and advancement to candidacy.

## PHIL - Philosophy

PHIL 8225 - Philosophy of Art (3)
An inquiry into historical and contemporary philosophical perspectives on the making, interpreting and criticizing of works of art, including relations of the arts to other dimensions of cultures.

Prerequisite: Graduate standing. Crosslisted as: PHIL 3220.

## PHIL 8655 - Philosophy of Mind (3)

A discussion of various accounts of the nature of minds which focuses upon philosophical problems such as whether the mind is identical with the brain, the extent of similarities between human minds and computers, the nature of personal identity and the relationship of mental activity to behavior.
Crosslisted as: PHIL 3650.

## PHIL 8900 - Readings in Philosophy (3)

An individually organized program of readings pertinent to one or more topics subordinate to the heading of Philosophy. To be carried out under the supervision of a member of the graduate faculty. May be repeated once for credit.

Prerequisite: Graduate, permission of instructor, and no 'incompletes' outstanding.

## PHYS - Physics

## PHYS 8025-Optics (3)

The behavior of electromagnetic radiation as disclosed by studies of geometrical, wave and quantum optics. Topics include reflection and refraction, matrix methods in paraxial optics, lasers and holography, the human eye,
interference, coherence, polarization, Frauenhofer and Fresnel diffraction.

Prerequisite: PHYS 1120 or 2120 and MATH 1970. Crosslisted as: PHYS 3020.

## PHYS 8055 - The Philosophy of Space Exploration (3)

This course deals mainly with the justification of space exploration in the face of conflicting needs. Topics to be studied include objections to the space program and responses to them, spin-off benefits, space industrialization, planetary and interstellar exploration, space colonies, search for life elsewhere, and other related theoretical issues.

Prerequisite: For PHYS 3050; junior or permission of instructor. For PHYS 8055; graduate or permission of instructor. Crosslisted as: PHYS 3050.

## PHYS 8155 - Modern Developments in Physics (3)

A resume of the most important discoveries, changes and new concepts gleaned from the last decade of research in physics. Superconductivity, lasers, masers, superfluidity, ultra large magnetic fields, space plasmas, nuclear fusion power, etc. Designed for updating physical science concepts for science majors and for science teachers.

Prerequisite: 1120 or 2120. Crosslisted as: PHYS 3150.

## PHYS 8165 - Current Topics in Science (1-3)

The subject matter of this course will generally not be presented in a standard physics course and may be of an interdisciplinary nature. The specific topics and prerequisites will be listed in the schedule.

Prerequisite: Permission of instructor. Crosslisted as: PHYS 3160.

## PHYS 8206 - Introduction to Quantum Mechanics (3)

This course provides an introduction to the historical development of modern physics and to the Schroedinger formulation of quantum mechanics. Specific topics will include square well potential barriers, simple harmonic oscillator potential and the hydrogen atom. Characteristics of multi-electron atoms, including angular momentum coupling schemes, spectra and transition rules.

Prerequisite: PHYS 3250 or permission. Crosslisted as: PHYS 4200.

## PHYS 8216 - Quantum Theory (3)

The matrix operator formalism is covered along with philosophical implications of this approach. The methods developed will be applied to simple harmonic oscillator and hydrogen atom potentials. Raising and lowering operators, creation-annihilation operators, and first and second order perturbation theory will be discussed.

Prerequisite: PHYS 4200 or permission. Crosslisted as: PHYS 4210.

## PHYS 8226 - Physics of Molecules and Solids (3)

This course covers the various types of atomic bonding found in molecules and solids. Electronic energy levels and spectra of molecules will be discussed. Topics in solid state physics will include mechanics and thermodynamics of crystals, the scattering of waves including x-ray and neutron scattering, electron scattering and phonon and photon interactions.
Prerequisite: PHYS 4220/8226 or permission of instructor. Crosslisted as: PHYS 4220.

## PHYS 8236 - Special Relativity and Nuclear Physics (3)

This course includes a brief historical background of the development of relativity theory and the importance of the experiments performed in conjunction with it. Lorentz transformations and covariant formalism will be developed and applied to certain problems in mechanics and electricity and magnetism. The nuclear physics portion of the course will include the historical development of the concept of the nuclear atom. Theoretical models of nuclear structure will be discussed, along with the theory of alpha, beta and gamma decay. Fission and fusion discussed as time permits.

Prerequisite: PHYS 4200/8206 or permission of instructor. Crosslisted as: PHYS 4230.

## PHYS 8356 - Astrophysics (3)

This course introduces the fundamentals of astrophysics to students with a prior knowledge of physics and mathematics. A review will be given of light and telescopes, classical and quantum mechanics and special relativity. Basic laws of physics will be applied to various topics such as the sun, nuclear fusion and particle physics, evolution and end state of stars, interstellar medium, galaxies and cosmology.
Prerequisite: PHYS 2130 or 4200 and MATH 1970. Recommended: PHYS 1350. Crosslisted as: PHYS 4350.

## PHYS 8455-Classical Mechanics (3)

Statics and dynamics of particles and rigid bodies including the equations of Lagrange and Hamilton.
Prerequisite: MATH 1950, PHYS 3250 or permission. Crosslisted as: PHYS 3450.

PHYS 8605 - Thermodynamics and Statistical Physics (3)

Topics include: empirical and absolute temperature, equations of state, work, heat, entropy, the four laws of thermodynamics, phase changes, thermodynamic potentials, classical and quantum statistics of an ideal gas. Applications to be included: Einstein theory of a solid, paramagnetism, blackbody radiation, and conduction electrons.

Prerequisite: PHYS 2120 and MATH 1970. Crosslisted as: PHYS 3600.

## PHYS 8755 - Electricity and Magnetism I (3)

An advanced study of electrostatics and magnetostatics, including Coulomb's law, Gauss' law, the scalar potential, conductors and dielectrics, electrostatic energy, special methods, electric currents, Ampere's law, the magnetic induction, Faraday's law, and the electromagnetic wave equation as obtained from Maxwell's equations, with simple examples such as transmission lines and antennas.

Prerequisite: MATH 1950, 1960, 1970, PHYS 3250, or permission. Crosslisted as: PHYS 3750.

## PHYS 8765 - Electricity and Magnetism II (3)

A selection of more advanced topics from electromagnetic theory, including a deeper treatment of the electromagnetic wave equations derived from Maxwell's equations, extending to propogation, reflection, and refraction of plane waves, waves in wave guides, and radiation. Other topics covered might be magnetism and magnetic energy, plasmas, and special relativity.
Prerequisite: PHYS 3750. Crosslisted as: PHYS 3760.

## PHYS 8805-Optics (3)

The behavior of electromagnetic radiation as formulated in the ray, wave, and quantum models. Topics will include: reflection and refraction, vergence, matrix method, optical instruments, scalar waves, electromagnetic waves, blackbody radiation, interference, diffraction, and lasers; if time permits, fiber optics and holography will also be included.

Prerequisite: PHYS 1120 or 2120 and MATH 1970. Crosslisted as: PHYS 3800.

## PHYS 8956 - Problems in Physics (1-3)

Individual laboratory and/or library work, or reading course in some field of physics.

Prerequisite: PHYS 2120 and permission of instructor. Crosslisted as: PHYS 4950 and PHYS 4960 and PHYS 8966.

## PHYS 8960 - Topics in the Teaching of Natural Science (1-4)

This course is for K-12 science teachers with emphasis on content appropriate to the educational standards of the State of Nebraska and the National Science Education Standards. Teaching methodologies and technologies will be integrated with the subject matter. The format varies but is that of a workshop using lecture, individual mentoring, group study, laboratory exercises and presentations. The number of credits offered will vary.

Prerequisite: Permission of Instructor.

## PHYS 8966 - Problems in Physics (1-3)

Individual laboratory and/or library work, or reading course in some field of physics.

Prerequisite: PHYS 2120 and permission of instructor. Crosslisted as: PHYS 4950 and PHYS 4960 and PHYS 8956.

## PSCI - Political Science

## PSCI 4110 - Political Psychology (3)

A course covering the psychology of politics. It is concerned with the role of human thought, emotion, and behavior in politics, and the linkages between them. In this course we will examine the psychological factors behind the motivations for the mass public (voters) and elites (leaders or political actors). For the mass public, we will consider social identity, affect and cognition, personality predispositions such as authoritarianism, how people are socialized politically, racial prejudice, tolerance, and political knowledge. For political actors we will consider personality analysis, as well as the political psychology of genocide and terrorism.

Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100 is recommended. Crosslisted as: PSCI 8116 and PSYC 4110 and PSYC 8116.

## PSCI 4240 - International Conflict Resolution (3)

This course surveys different approaches to peace, their basic assumptions, and their application to current conflicts.

Prerequisite: Undergraduate: PSCI 2210 or junior status or permission of instructor. Graduate: PSCI 2210 or equivalent is recommended. Crosslisted as: PSCI 8246.

## PSCI 4250 - Intelligence and National Security (3)

The objective of this course is to provide students with an understanding and knowledge of the United States intelligence services, and their relation to broader U.S. national security policy.
Prerequisite: Undergraduate: PSCI 2210 or junior standing or permission of instructor. Graduate: PSCI 2210 or equivalent is recommended. Crosslisted as: PSCI 8256.

## PSCI 8000 - Seminar in the Research Methods of Political Science (3)

This course introduces students to the methods of data collection and analysis for political science research.

Prerequisite: Permission of graduate adviser.

## PSCI 8015 - Urban Politics (3)

A course concerned with the development of cities, their forms of government, powers, functions, and problems in an industrialized and urbanized society.

Prerequisite: Permission of Political Science graduate advisor.

## PSCI 8026 - Political Psychology (3)

A course covering the psychology of politics. It is concerned with the role of human thought, emotion, and behavior in politics, and the linkages between them. In this course we will examine the psychological factors behind the motivations for the mass public (voters) and elites (leaders or political actors). For the mass public, we will consider social identity, affect and cognition, personality predispositions such as authoritarianism, how people are socialized politically, racial prejudice, tolerance, and political knowledge. For political actors we will consider personality analysis, as well as the political psychology of genocide and terrorism.

Prerequisite: undergrad:PSCI 1100 or PSCI 1000; junior standing or permission of instructor grad:graduate standing. Crosslisted as: AS 4020.

PSCI 8036 - The Presidency (3)
This course introduces students to the development and modern application of presidential leadership through examination of presidential selection, presidential decision-making, the relationship of the presidency with other governmental and non-governmental actors, and the role of the presidency in making public policy.
Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100. Crosslisted as: PSCI 4030.

PSCI 8040 - Seminar in American Government and Politics (3)

This course introduces students to classic and contemporary scholarship on the principles, institutions, processes, and policies of national government in the United States with an emphasis on engaging in thoughtful discussion and individual research.

Prerequisite: Permission of the graduate advisor.

## PSCI 8045 - Government and Politics of Nebraska (3)

A survey of the political life of Nebraska including its political culture, politcal institutions, recent political history, and recurring issues and policy concerns.

Prerequisite: Graduate. Crosslisted as: PSCI 3040.
PSCI 8046 - Congress and the Legislative Process (3)
This course introduces students to the development of the Congress and modern application of the legislative process through examination of congressional elections,
congressional leadership, congressional decision-making, legislative rules and procedures, the relationship of the Congress with other governmental and non-governmental actors, and the role of the Congress in making public policy.
Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100. Crosslisted as: PSCI 4040.

## PSCI 8055 - State Government and Politics (3)

This course analyzes state government and politics in the United States, focusing on the development, structures, functions, and policies of states.
Prerequisite: For PSCI 8055: Graduate standing. Crosslisted as: PSCI 3050.

## PSCI 8056 - The Judicial Process (3)

This is a course in the administration of justice. It examines the federal and state courts with respect to their powers, judicial selection, the bar and the reform movements in the most basic of all of man's objectives, the pursuit of justice.
Prerequisite: for 4050, PSCI 1100 and junior. Crosslisted as: PSCI 4050.

## PSCI 8100 - Seminar in Political Economy (3)

A comprehensive study of theories of political economy, linkages between politics and economics, and major contemporary issues.

Prerequisite: Permission of the graduate adviser.

## PSCI 8116 - Political Psychology (3)

A course covering the psychology of politics. It is concerned with the role of human thought, emotion, and behavior in politics, and the linkages between them. In this course we will examine the psychological factors behind the motivations for the mass public (voters) and elites (leaders or political actors). For the mass public, we will consider social identity, affect and cognition, personality predispositions such as authoritarianism, how people are socialized politically, racial prejudice, tolerance, and political knowledge. For political actors we will consider personality analysis, as well as the political psychology of genocide and terrorism.
Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100 is recommended. Crosslisted as: PSCI 4110 and PSYC 4110 and PSYC 8116.

## PSCI 8126 - Public Opinion and Polling (3)

An analysis of the processes of public opinion formation and change, the relationship between public opinion and democratic processes, and the effects of public opinion on the operation of the political system.

Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100.
Crosslisted as: PSCI 4120.

## PSCI 8135 - Women and Politics (3)

Women and Politics provides an overview of women's political participation including holding elective office, socialization, the feminist movement and its opposition, and public policies with particular impact on women. The focus is on contemporary perspectives on women in American political ideas and behavior. This course fulfils the Political Science department's American Politics field requirement.

Crosslisted as: WGST 8135 and PSCI 3130 and WGST 3130.

## PSCI 8150 - Seminar in Public Law (3)

Practical methods of research as applied to specifically selected problems in the areas of administrative, constitutional and/or international law. Problems studied will correspond to those encountered by government employees, officials and planners at the national, state and local level. Emphasis will be varied from semester to semester in accordance with the background and objectives of the students enrolled.

Prerequisite: Three semester hours in public law or permission of graduate adviser.

## PSCI 8165 - Political Parties (3)

This course introduces students to the origin, development, structure, and functions of political parties in the United States as political organizations, coalitions of voters, and governing coalitions that seek to hold office and influence public policy.

Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100.
Crosslisted as: PSCI 3160.

## PSCI 8175 - Interest Groups (3)

A study of the basic interests and their efforts to influence both the opinion and the policy of the public sector of American government.

Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100. Crosslisted as: PSCI 3170.

## PSCI 8176 - Constitutional Law: Foundations (3)

Examination of the principles, design and intended operation of the American constitutional system. Analysis of the Declaration of Independence, the Articles of Confederation and the Constitutional Convention. Major emphasis on The Federalist.

Prerequisite: PSCI 1100 (or equivalent), junior, or permission of instructor. Crosslisted as: PSCI 4170.

## PSCI 8185 - Campaigns and Elections (3)

This course introduces students to the evolution and modern application of campaigns and elections in the United States through examination of campaign management and campaign strategy in congressional and presidential elections.

Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100. Crosslisted as: PSCI 3180.

## PSCI 8200 - Seminar in Foreign and Security Policies

 (3)An investigation of policy making regarding foreign and security policy, with emphasis on U.S. national security. Domestic pressures, external influences and institutions responsible for decision making regarding foreign and national security are examined.
Prerequisite: Permission of the graduate student adviser.

## PSCI 8246 - International Conflict Resolution (3)

This course surveys different approaches to peace, their basic assumptions, and their application to current conflicts.

Prerequisite: Undergraduate: PSCI 2210 or junior status or permission of instructor. Graduate: PSCI 2210 or equivalent is recommended. Crosslisted as: PSCI 4240.

## PSCI 8250 - Seminar in Global Politics (3)

A comprehensive study of theories of global politics, modern inter-relationships among nations, and major contemporary issues.

Prerequisite: Permission of graduate adviser.

## PSCI 8256 - Intelligence and National Security (3)

The objective of this course is to provide students with an understanding and knowledge of the United States intelligence services, and their relation to broader U.S. national security policy.
Prerequisite: Undergraduate: PSCI 2210 or junior standing or permission of instructor. Graduate: PSCI 2210 or equivalent is recommended. Crosslisted as: PSCI 4250.

## PSCI 8286 - Inter-American Politics (3)

Analysis of the role of Latin American states in the international political arena. Emphasis upon developing, applying and testing an explanatory theory of international politics through the study of the inter-American system: the regional institutional and ideological environment, power relations, policies, and contemporary problems.

Prerequisite: For 4280, junior. Crosslisted as: PSCI 4280.

## PSCI 8300 - Seminar in Political Theory (3)

Analysis of selected topics in normative, empirical and ideological political theory and their impact upon practitioners of politics.
Prerequisite: Six hours of political theory or permission of graduate adviser.

## PSCI 8345 - American Political Thought (3)

An overview and analysis of the dominant political theories and ideas that have been present in American thinking from the days of the Puritans to today, and the individuals and groups who held them.

Prerequisite: Undergraduate: PSCI 1100 or PSCI 2310 or junior standing or permission of instructor. Graduate: PSCI 2310. Crosslisted as: PSCI 3340.

## PSCI 8346 - Contemporary Political Theory (3)

Analysis of leading works of contemporary political philosophy including Marx, Spencer, Dahl, Rawls, feminism, and rational choice. The theories, their interrelationships, the theorists, and the manifestations of these works will be discussed and analyzed.
Prerequisite: Undergraduate: PSCI 2310 or junior standing or permission of instructor. Graduate: PSCI 2310.
Crosslisted as: PSCI 4340.

## PSCI 8356 - Democracy (3)

A basic study of theory, practice and practitioners of political democracy, its roots, development, present application and problems and future.

Prerequisite: For 4350, junior. Crosslisted as: PSCI 4350.

## PSCI 8366 - Authoritarian Regimes (3)

An analysis of various types of authoritarian regimes, their differences from democratic governments, and the causes of their establishment, maintenance, and failure.

Prerequisite: For 4360, junior. Crosslisted as: PSCI 4360.

## PSCI 8376 - Comparative Socialist Systems (3)

A comparative examination of Marxist-inspired political movements, political parties and political systems, with particular emphasis upon contemporary transitions.
Prerequisite: For 4370, junior. Crosslisted as: PSCI 4370.

## PSCI 8386 - Topics in Political Theory (3)

This course will conduct an in-depth exploration of an important issue, movement, thinker, or work in political theory. The particular subject matter will vary and will be chosen by the instructor.

Prerequisite: Admission to the Political Science Graduate Program.

PSCI 8506 - Government and Politics of Great Britain (3)

A comprehensive study of British politics and government. Emphasis will be focused on the formal institutions and informal customs and practices of the British political system.
Prerequisite: For 4500, junior. Crosslisted as: PSCI 4500.

## PSCI 8526 - Politics in France (3)

An examination of the French political heritage, contemporary political institutions and problems, and political and policy responses to these problems.

Prerequisite: For 4520, junior. Crosslisted as: PSCI 4520.
PSCI 8645 - Government and Politics of P.R.C. and the Pacific Rim (3)

A comprehensive study of political institutions and processes of the P.R.C. and several other remaining socialist countries in the region, and major issues confronting them, and their global implications, with a special emphasis on their development strategies.

Prerequisite: Permission of graduate adviser. Crosslisted as: PSCI 3640.

PSCI 8665 - Governments \& Politics of Japan and the Pacific Rim (3)

A systematic comparative study of political processes, structures, policies and other characteristics of Japan and several other selected countries in the region as a developmental model and a single economic and geopolitical block in the globally interdependent world.

Prerequisite: Permission of graduate adviser. Crosslisted as: PSCI 3660.

## PSCI 8705 - Middle East Politics (3)

An overview of the government and politics in the contemporary Middle East, including considerations of religion, culture, economy, military power, regional relations, and international relations. This course satisfies the department's comparative politics requirement.

Prerequisite: For 3700, junior and PSCI 1000 -
Introduction to Political Science or instructor permission. For 8705 , admission to graduate study and permission of the graduate advisor. Crosslisted as: PSCI 3700.

## PSCI 8800 - Independent Study in Topics of Urbanism

 (1-2)Graduate student research on an individual basis under faculty supervision in topics pertaining to urbanism.

Prerequisite: Undergraduate major in one of the social sciences.

## PSCI 8900-Readings in Political Science (1-3)

Specially planned readings in political science for the graduate student who encounters scheduling problems in the completion of his/her degree program, or who has special preparatory needs and who is adjudged by the political science department to be capable of pursuing a highly independent course of study.

Prerequisite: Permission of graduate adviser.

## PSCI 8910 - Political Internship (3)

Internship in governmental and related agencies, augmented by seminars, individual instruction, and assigned readings, to directly learn the politics of policy advocacy, development and implementation at the local, state and national levels of government.

Prerequisite: Graduate, permission of the department.
PSCI 8925 - Advanced Topics in Political Science (1-3)
A pro-seminar on selected topics based upon analysis of the literature of political science and/or primary source materials.

Prerequisite: N/A.

## PSCI 8926 - Advanced Topics in Political Science (1-3)

A pro-seminar on selected topics based upon analysis of the literature of politcal science and/or primary source materials.

Crosslisted as: PSCI 4920.

## PSCI 8980 - Research Tutorial (3)

Directed research on a subject to be determined in consultation with the graduate advisor and tutorial director.
Prerequisite: Permission of graduate advisor.
PSCI 8990-Thesis (3-6)
A research project, written under the supervision of a graduate adviser in the Department of Political Science, in which the student establishes his/her capacity to design, conduct and complete an independent, scholarly investigation of a high order of originality. The research topic and the completed project must be approved by the student's departmental committee.
Prerequisite: Permission of graduate adviser.

## PSYC - Psychology

## PSYC 4110 - Political Psychology (3)

A course covering the psychology of politics. It is concerned with the role of human thought, emotion, and behavior in politics, and the linkages between them. In this course we will examine the psychological factors behind the motivations for the mass public (voters) and elites
(leaders or political actors). For the mass public, we will consider social identity, affect and cognition, personality predispositions such as authoritarianism, how people are socialized politically, racial prejudice, tolerance, and political knowledge. For political actors we will consider personality analysis, as well as the political psychology of genocide and terrorism.

Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100 is recommended. Crosslisted as: PSCI 8116 and PSCI 4110 and PSYC 8116.

## PSYC 4800 - Law \& Psychology: Ethics, Research \&

 Service (3)This course presents legal principles relevant to all psychological specialties, with special reference to mental health services. Ethical reasoning and the APA ethics code are considered.

Prerequisite: Undergraduate: PSYC 1010 and junior standing or approval of the instructor. Graduate: Admission to Graduate Program in Psychology and/or permission of instructor. Not open to nondegree students. Crosslisted as: PSYC 8806.

## PSYC 8000 - The Profession of Psychology (1)

Required non-credit course for graduate students in psychology. Intended to familiarize the beginning graduate student with the profession of psychology including such topics as ethics, professional organizations, job and educational opportunities, use of reference materials, licensing and certification and other relevant material.

## PSYC 8016 - History of Psychology (3)

A study of the origins, development and nature of psychology and its relation to external events; emphasis on the period since 1875.
Crosslisted as: PSYC 4010.

## PSYC 8060 - Computer Concepts in Psychology and the Behavioral Sciences (3)

Introductory course emphasizing the applications of computers in the areas of psychology, sociology and education. Includes a functional description of computers and a discussion of programming languages as well as specific uses.

Prerequisite: PSYC 2130 or equivalent.
PSYC 8116 - Political Psychology (3)
A course covering the psychology of politics. It is concerned with the role of human thought, emotion, and behavior in politics, and the linkages between them. In this course we will examine the psychological factors behind the motivations for the mass public (voters) and elites (leaders or political actors). For the mass public, we will consider social identity, affect and cognition, personality
predispositions such as authoritarianism, how people are socialized politically, racial prejudice, tolerance, and political knowledge. For political actors we will consider personality analysis, as well as the political psychology of genocide and terrorism.

Prerequisite: Undergraduate: PSCI 1100 or junior standing or permission of instructor. Graduate: PSCI 1100 is recommended. Crosslisted as: PSCI 8116 and PSCI 4110 and PSYC 4110.

## PSYC 8140 - Nonparametric Statistics (3)

Study of distribution-free statistics with particular emphasis on application of distribution-free tests to research problems in social behavioral sciences.
Prerequisite: PSYC 2130 or equivalent.

## PSYC 8250 - Family Analysis and Treatment (3)

This courses covers theories and techniques for family therapy, with special reference to adapting individual and group therapeutic, as well as consultation, principles for family interventions. Case analyses and evaluation methods are considered.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 8256 - Limits of Consciousness (3)

A course focusing on the scientific study of the psychology, neurology, and philosophy of mind. This course is designed for students who are interested in thinking about thinking.

Prerequisite: PSYC 1010. Crosslisted as: PSYC 4250.

## PSYC 8276 - Animal Behavior (3)

Behavior of diverse animals for the understanding of the relationships between nervous integration and the behavior manifested by the organism, as well as the evolution and adaptive significance of behavior as a functional unit.
Prerequisite: Permission of instructor. Crosslisted as: BIOL 4270 and PSYC 4270 and BIOL 8276.

## PSYC 8286 - Animal Behavior Laboratory (2)

Laboratory and field studies of animal behavior with an ethological emphasis. Classical laboratory experiences and independent studies will be conducted.

Prerequisite: BIOL/PSYC 4270/8276. Crosslisted as: BIOL 4280 and PSYC 4280 and BIOL 8286.

## PSYC 8316 - Psychological and Educational Testing (3)

The use of standardized tests in psychology and education is considered with special regard to their construction, reliability and validity.
Prerequisite: PSYC 1010 and Junior-Senior. Crosslisted as: PSYC 4310.

## PSYC 8326 - Hormones \& Behavior (3)

In this course, students will examine the interaction between hormones, chemical messengers released from endocrine glands, and behavior in both human and animal systems. Methods for studying hormonal issues on behavior will be addressed. This course will provided students in psychology, biology, and related disciplines an understanding of how hormones affect sensory processing, motor activities, and processing of information in the central nervous system.
Prerequisite: For BIOL/PSYC 4320: PSYC 1010 and either BIOL 1020 or 1750; for BIOL/PSYC 8326: admission into the graduate college. Crosslisted as: PSYC 4320 and BIOL 4320 and BIOL 8326.

## PSYC 8446 - Abnormal Psychology (3)

A course designed to examine the aberrant behavior of individuals. Symptoms, dynamics, therapy and prognosis of syndromes are considered.

Prerequisite: PSYC 1010. Crosslisted as: PSYC 4440.

## PSYC 8456 - Personality Theories (3)

A comparative approach to the understanding and appreciation of personality theories considering history, assertions, applications, validations and prospects.

Prerequisite: For PSYC 4450: PSYC 1010. Crosslisted as: PSYC 4450.

## PSYC 8476 - Mental Health and Aging (3)

The goal of this course is to survey the mental health needs of older adults. Consideration is given to identifying both positive mental health and pathological conditions.
Treatment interventions effective with older adults and their families also are discussed.

Crosslisted as: PSYC 4470 and GERO 8476 and GERO 4470.

## PSYC 8500 - Professional, Legal, and Ethical <br> Foundations of School Psychology (3)

This course covers the role description and job activities of a school psychologist, as well as theories, assessment and intervention techniques, certification requirements, employment opportunities, public policy, legislation, and ethics relevant to school psychology. School-based field experiences will also be included in the course.
Prerequisite: Admission to the School Psychology Graduate Program.

## PSYC 8520 - Foundations of Assessment (3)

Course content covers traditional psychometric concepts (e.g., norms, reliability, validity) and their application to various areas of human behavior that are assessed (e.g., cognitive ability, personality, achievement). Clinical
considerations are applied to how assessment information is integrated into a problem-solving process.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 8526 - Psycholinguistics (3)

A discussion of the literature concerned with how such psychological variables as perception, learning, memory and development relate to the linguistic variables of sentence structure, meaning and speech sounds.

Prerequisite: Permission of instructor. Crosslisted as: PSYC 4520.

## PSYC 8530 - Early Childhood Assessment (3)

This course is an introduction to the assessment of children during early development including infancy, toddler, preschool and early primary ages. Assessment will be discussed as it relates to problem-solving and data-based decision making (i.e., diagnosis, treatment, program evaluation). Students will learn the principles of working with young children and their families and how these principles will be used in conducting valid and reliable assessments that, in turn, lead to appropriate interventions.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 8540 - School Age Assessment (3)

This course covers data-based decision-making as it applies to schools. Students will learn and practice the skills of reviewing records, interviewing, systematically observing, and testing. They will be exposed to the following types of assessments: academic, behavior, curriculum-based, intellectual, social-emotional, and screening measures.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 8550 - Psychotherapeutic Interventions (3)

This course provides graduate students knowledge in the application of evidence-based therapeutic interventions that can be utilized with children and adolescents in school, home, and family settings. Various approaches and techniques are presented along with supporting research. Observation and participation in clinical cases may be arranged.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 8576 - Behavior Analysis and Interventions (3)

Introduction to experimental methodology, rationale and research literature of changing behavior through behavior modification techniques. Particular attention will be paid to methodological concerns regarding single subject design,
ethical considerations and ramifications of behavior intervention with children and youth.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor. Crosslisted as: PSYC 4570.

## PSYC 8590 - Psychology of Exceptional Children (3)

The content of this course will focus on children who are identified as "exceptional" in terms of behavioral, cognitive, and learning problems. Exceptionality in this sense includes students who are in need of preventative and/or intervention-based services. The topics will be approached from a multidisciplinary perspective and emphasis will be placed on utilizing a response to intervention approach in working with exceptional individuals. The service-learning component of the course will require students to learn about the educational environment by spending time in an elementary classroom, consulting with school staff and addressing the educational needs of students.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 8616 - Human Factors Engineering (3)

Based on knowledge of human strengths and limitations, this course will provide an overview of how basic principles of human factors can be utilized to reduce error, increase productivity, and enhance safety, comfort, and health. Applications to real-world equipment design, task design, environmental design, selection and training will be included.

Prerequisite: PSYC 1010 or permission of instructor. Crosslisted as: PSYC 4610.

## PSYC 8636 - Organizational Psychology (3)

This is a survey course which will cover the major concepts, theories and empirical research related to organizational psychology. Specific topics will include: work motivation, leadership, decision making and job satisfaction as well as more recent trends such as cultural diversity, work teams, work-family and quality issues.

Prerequisite: Admission to a graduate program or graduate certificate program. Crosslisted as: PSYC 4630.

PSYC 8646 - Personnel Psychology (3)
A survey of psychological principles, theories and research related to personnel issues. Course includes discussion of personnel selection, performance appraisal, recruitment, training and health and safety.
Prerequisite: Admission to a graduate program or graduate certificate program. Crosslisted as: PSYC 4640.

## PSYC 8806 - Law \& Psychology: Ethics, Research \& Service (3)

This course presents legal principles relevant to all psychological specialties, with special reference to mental health services. Ethical reasoning and the APA ethics code are considered.

Prerequisite: Undergraduate: PSYC 1010 and junior standing or approval of the instructor. Graduate: Admission to Graduate Program in Psychology and/or permission of instructor. Not open to nondegree students. Crosslisted as: PSYC 4800.

## PSYC 8900 - Problems in Psychology (1-6)

A faculty-supervised research project, involving empirical or library work and oral or written reports.

Prerequisite: Written permission of department.
PSYC 8950 - Practicum for Master's Students (1-6)
Faculty-supervised experience in industry or business designed to bridge the gap between the classroom and a job, emphasizing use of previously acquired knowledge in dealing with practical problems for master's students.

Prerequisite: Written permission of your practicum committee.

## PSYC 8970 - Master's Level Practicum in School Psychology (1-6)

Faculty-supervised experience designed to provide experience in academic and behavioral assessment and intervention with children, and consultation with parents and school personnel.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 8980 - Practicum in Developmental Psychology (1-6)

Faculty-supervised experience in a setting designed to provide a practical understanding of theoretical concepts of human development. Emphasizes direct observation and or personal interaction as a means of training, and can be directed toward various populations within the developmental life span (e.g., infants, preschoolers, middle childhood, adolescents, adults, aged persons).
Prerequisite: PSYC 9560 and permission of Developmental Psychology Area Committee.

PSYC 8990 - Thesis (1-6)
Independent research project written under supervision of a faculty committee. May be repeated up to a total of six hours.

Prerequisite: Written permission of your thesis committee.

## PSYC 8800-Ethics and Law for Psychologists (3)

## PSYC 8836 - Individual Differences (3)

## PSYC 9010 - Proseminar: Statistical Methods I (3)

The purpose of this course is to introduce students to the statistical concepts of correlation and regression. The course will cover basic understanding of these techniques, their applications, and interpretations of results.

Prerequisite: Graduate standing and an undergraduate course in basic statistics which included an introduction to correlation and linear regression.

PSYC 9020 - Proseminar: Statistical Methods II (3)
An advanced approach to experimental design and inferential statistics using the analysis of variance models.
Prerequisite: A course in basic statistics which included an introduction to analysis of variance.

## PSYC 9030 - Seminar: Topics in Industrial

 Organizational Psychology (3-9)A topic area within field of Industrial Organizational Psychology will be explored in depth.

Prerequisite: Admission to Industrial Organizational graduate program and permission of instructor.
PSYC 9040 - Proseminar: Learning (3)
A comprehensive and intensive coverage of experimental literature on learning in humans and animals.

Prerequisite: Permission of instructor.
PSYC 9070 - Proseminar: Cognitive Psychology (3)
This course will be a comprehensive overview of the field of cognitive psychology including the topics of attention and performance, memory, problem solving, and language. In addition, there will be a more in-depth coverage of selected issues.

Prerequisite: Graduate standing or permission of instructor.
PSYC 9090 - Theory of Measurement and Design (3)
Study of theoretical and practical problems related to the development and use of psychological measures and research designs covering such topics as scaling, test development, reliability, validity, interpretation of results and generalizability.
Prerequisite: PSYC 3130 or equivalent.
PSYC 9100 - Small n Research Designs (3)
This course uses applications of research methodology that involve direct observation and single-subject designs to identify evidence-based practices that address clinical problems experienced by individuals across a variety of settings. Topics covered include behavioral assessment
techniques, graphing data, single subject experimental designs, and consumer satisfaction with interventions.

Prerequisite: Acceptance into a Graduate Program in the NU System and permission of the instructor.
PSYC 9120 - Multivariate Statistical Analysis (3)
An examination of statistical techniques for describing and analyzing multivariate data commonly collected in behavioral research. Analytic techniques derived from general linear model will be considered, focusing on proper interpretation and use. The course is intended for doctoral students in psychology and (selectively) for advanced masters students in behavioral sciences.

Prerequisite: PSYC 9090, 9010 and 9020 or permission of instructor.

## PSYC 9210 - Proseminar: Perception (3)

A comprehensive and intensive coverage of the experimental literature on perception in humans and animals.

Prerequisite: Permission of instructor.
PSYC 9230 - Proseminar: Behavioral Neuroscience (3)
A study of the biological substrates of behavior with emphasis upon neuroanatomy, neurophysiology and neuropharmacology.

Prerequisite: Permission of instructor.

## PSYC 9240 - Proseminar: Evolutionary Psychology (3)

A comprehensive overview of behavioral biology including topics of evolution and behavior, behavioral ecology, physiology and genetics of behavior, and learning.

Prerequisite: Permission of instructor.
PSYC 9290 - Seminar in Developmental Psychobiology (3-9)

An in-depth analysis of a specific topic in psychobiology.
Prerequisite: Permission of instructor.
PSYC 9320 - Seminar in Program Evaluation (3)
This course is intended to help advanced graduate students in the applied social sciences understand the literature and conduct evaluation research. The history of program evaluation and philosophies manifest in evaluation research are reviewed, alternative evaluation models are discussed, and relevant methodological and practical issues such as quasi-experimental design and utilization are explored.

Prerequisite: Students should have prior graduate-level course work or experience in research design and statistics in the applied social sciences.

## PSYC 9430 - Proseminar: Personality (3)

A course considering the effects of personality variables on behavior. A historical, theoretical, psychometric and experimental approach will be emphasized.
Prerequisite: Permission of instructor.
PSYC 9440 - Proseminar: Social Psychology (3)
Examination of theories, research findings and controversies in social psychology. Topics will include socialization; person perception; interpersonal attraction, leadership and group effectiveness; attitudes, attitude measurement, and attitude change; intergroup relations, power and social influence. New topics will be added as they become part of the research interests of social psychologists.

Prerequisite: Permission of instructor.

## PSYC 9460 - Seminar in Aging and Human Behavior

 (3)This course will examine in detail age-related changes in psychological processes and explore the implications of these changes for behavior. The course is intended for graduate students in psychology and gerontology. Students from other programs may enroll with permission of the instructor.

Prerequisite: Graduate standing in gerontology or psychology or permission of the instructor. Crosslisted as: GERO 9460.

## PSYC 9500 - Socioemotional Development (3)

This seminar is designed to provide an in-depth examination of the research literature on socioemotional development (emotional development that influences social behavior development), with particular emphasis on both classic issues and current topics of debate. The course topics cover issues of importance in infancy, childhood, and adolescence. Research methods, as they apply to socioemotional development, will be emphasized throughout the course.

Prerequisite: Graduate standing and PSYC9560.

## PSYC 9510 - Research Methods in Developmental

 Psychology (3)This course is designed to provide graduate students in developmental psychology and school psychology with the necessary skills to enable them to frame a research question and to design a study to answer that question. In addition, students will become familiar with methodologies for specialized areas within developmental psychology. Research ethics is a major component in the course.
Prerequisite: PSYC 9560 Proseminar in Developmental Psychology.

## PSYC 9520 - Language Development (3)

Students will explore the course of language development as well as current theoretical views attempting to explain how language is acquired. Coverage includes all aspects of language including phonology, syntax, semantics, and pragmatics. A portion of this course will be devoted to current computer-based methods in the analysis of child language.
Prerequisite: PSYC 9560 or a background in linguistics or communication disorders.

## PSYC 9530 - Cognitive Development (3)

This course covers contemporary issues in theory and research concerning the development of processes by which environmental information is perceived, attended to, stored, transformed and used. Both Piagetian and information processing orientations will be emphasized.
Prerequisite: PSYC 9560.
PSYC 9540 - Memory and Mechanism of Development (3)

The focus of this course is on research and theory concerning transition processes in cognitive development. Topics include the role of memory in development and the mechanisms underlying children's advancing cognitive abilities. The emphasis on memory is based on the assumption that mental representations are crucial for development to take place.

Prerequisite: PSYC 9560.

## PSYC 9550 - Psychosocial Development (3)

A seminar focusing on research methods, theory and the empirical literature as they apply to social and personality development across the life span. All students will be expected to design and conduct a mini-observational experimental study in some specific area of social and personality development.
Prerequisite: Graduate standing and PSYC 9560.
PSYC 9560 - Proseminar: Developmental Psychology (3)

A survey of developmental processes across the life-span, with a particular emphasis on the interface of biological, cognitive and social influences. Theories of human development and issues pertaining to developmental processes are examined. The primary focus in the course is on the research literature pertaining to developmental psychology. Special emphasis is given to the role of context in development and to the topics of research methods, multicultural factors in development and social policy.
Prerequisite: Graduate standing.

## PSYC 9570 - Applied Behavior Analysis (3)

A comprehensive introduction to experimental methodology in applied behavior analysis. Topics covered include observational recording systems, reliability indices, procedural implementation of behavioral techniques, single-subject research designs and a broad review of the research literature.

Prerequisite: A minimum of one course in learning theory (PSYC 8560, 8570, 9040, or equivalent) and permission.
PSYC 9574 - Laboratory in Applied Behavior Analysis (3-6)

Laboratory work coordinated with PSYCH 9570 consisting of the systematic application of behavioral technology within the context of single-subject experimental designs. Emphasis will be on the modification of behavior of children with cognitive, social or behavioral problems.
Prerequisite: PSYC 9570 or permission.
PSYC 9580 - Psychological Assessment IV: Adulthood (3)

This course deals with intelligence, perceptual, and achievement tests and projective and objective personality methods for the psychological assessment of adults. It is intended for advanced graduate students in psychology preparing to be clinical practitioners in schools and mental health facilities.

Prerequisite: PSYC 8520; 8530 and/or $8540 ; 8596$ or 8446 ; and permission of instructor.

## PSYC 9590 - Seminar in Developmental Psychology (39)

Faculty and student presentations organized around one of the following three major subdivisions of child psychology: (1) Social and personality development, (2) Developmental changes in memory and learning, (3) Cognitive growth and functioning. The course may be repeated each time a different topic is covered, up to a maximum total of nine credit hours.

Prerequisite: Permission of instructor.

## PSYC 9600-Developmental Psychopathology:

 Research and Practice (3)This advanced course provides an overview of developmental factors relevant to psychopathology across the life span. Emphasis is on analysis of research, and adaption of research findings to therapeutic interventions and programs.
Prerequisite: PSYC 4440 or 8446,9010 or 9020,9560 ; admission to program in PSYC or a related field and permission of instructor.

## PSYC 9610 - Industrial Motivation \& Morale (3)

A course focusing on theory and research in the areas of work motivation, work behavior and job satisfaction. Emphasis is placed on such topics as expectancy theory, job redesign, leadership, absenteeism, turnover, goal setting and behavior modification.

Prerequisite: Admission into industrial/organizational psychology graduate program and permission of instructor.

## PSYC 9620 - Industrial Training and Organizational Development (3)

This course will review theory and research relevant to training and organizational development, with emphasis on diagnosis, design, implementation, and evaluation. Practical concerns associated with intervention will be addressed.

Prerequisite: Admission into industrial/organizational psychology graduate program and PSYC 9090, PSYC 9010, and PSYC 9020.

## PSYC 9630 - Leadership Theories and Research (3)

The purpose of this course is to provide the student with a thorough review of the theories and research in the area of leadership. Theories reviewed will be those that focus on the role of the individual in effective leadership, the role of the situation, and the role of the followers. Special attention will be given to the psychological theories of leadership. The application of leadership research and theory to areas such as selection and training will also be review.

Prerequisite: Admission into the psychology graduate program or graduate standing and instructor permission.

## PSYC 9640 - Problem Solving \& Decision Making (3)

The primary objective of the course is to acquaint students with some of the major conceptual, methodological, and measurement issues within the field of problem solving and decision making. Due to the scope of this field, the course will focus on the psychological research on individual decision making, with special emphasis on the cognitive and motivational processes underlying problem solving and decision making. The second major objective of the course is to encourage students to creatively integrate and apply decision making approaches and findings to traditional areas of concern to the industrialorganizational psychologist (e.g., employee selection, performance appraisal, training, leadership, motivation). The third objective is to hone students' critical thinking skills and their ability to present their ideas in a clear and coherent manner using oral and written formats.

Prerequisite: Admission to Industrial/Organizational Psychology Graduate Program.

## PSYC 9650 - Research Methods in Psychology (3)

A course designed to allow students to integrate and extend their knowledge and understanding of psychological research. Students will develop skills in writing research proposals, conducting research, and preparing manuscripts for publications.

Prerequisite: PSYC 9010 or PSYC 9020.

## PSYC 9660 - Criterion Development and Performance Appraisal (3)

An in-depth examination of the fundamentals of personnel psychology including job analysis, criterion development and performance measurement and appraisal in organizations. Practical experience in the application of techniques and procedures is emphasized through group and individual projects in organizational settings.

Prerequisite: Admission to industrial/organizational psychology graduate program and PSYC 9090 (may be taken concurrently).

## PSYC 9670 - Personnel Selection (3)

An exploration of current theory and practice in personnel selection. Problem solving strategies are emphasized through the design, analysis, and interpretation of selection research and the implementation of selection programs consistent with Equal Opportunity Guidelines and federal law.

Prerequisite: Admission to industrial organizational psychology graduate program, PSYC 9660 and permission of instructor.

## PSYC 9780 - Advanced Consultation in Psychology and Education (3)

The course is designed to provide education and psychology professionals a comprehensive understanding of foundational theories and processes of consultation applied to education and psychology problems of children. A major objective is to focus on developing consultation skills considered necessary to be an effective consultant through direct practice and feedback. The course will emphasize the relationship between the consultant and parents, teachers, and other professionals within the school and child mental health settings.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 9790 - Seminar in School Psychology:

## Administration of Psychological Services (3)

This course is designed to give the advanced student in the School Psychology Program an overview of significant professional topics in the field, particularly administration of psychological services. Ordinarily topics such as state licensing laws, state of Nebraska certification requirements, public and state laws, special education
department guidelines, roles and functions and ethics will be included in the course.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.
PSYC 9910 - Topical Seminar in Psychology (1-3)
A discussion of specific advanced topics which will be announced whenever the course is offered.

Prerequisite: Permission of instructor.

## PSYC 9940 - School Psychology Applied Research Project (1-7)

The applied research project consists of students conducting an independent research project from start to finish. This project should have relevance to a practical aspect of school psychology and provide a unique contribution to the field. It may be quantitative or qualitative in nature, and must rely on sound research methodology.
Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 9950 - Practicum for Doctoral Students (1-6)

Faculty-supervised experience in industry or business designed to bridge the gap between the classroom and a job, emphasizing use of previously acquired knowledge in dealing with practical problems for doctoral students.
Prerequisite: Admission to industrial/organizational psychology graduate program.

## PSYC 9960 - Research Other Than Thesis (1-12)

Research work under supervision of a faculty member. May be repeated up to a total of 12 credit hours.
Prerequisite: Enrollment in a graduate program beyond the master's level and permission of department.

## PSYC 9970 - Ed.S. Level Practicum in School Psychology (1-6)

School Psychology School-Based Practicum is a capstone course in school psychology intended for students who have completed their Master's degree in School Psychology. This course is designed to reflect the scientist-practitioner model of training and practice in School Psychology. To accomplish this goal, students will be assigned to a practicing school psychologist employed by the public schools. The content of this course will focus on integrating previous and concurrent training experiences from courses and field experiences.
Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 9980 - Internship in School Psychology (3 or 6)

School Psychology Internship is the final course in school psychology intended for students who have completed all of their other coursework. It is a 1200 hour culminating experience leading to licensure/certification as a school psychologist in most states, and eligibility for the NCSP exam. The internship requires that students apply the domains of training and practice that are outlined in the School Psychology program philosophy and training objectives. University and site-based supervision is required.

Prerequisite: Admission to School Psychology Graduate Program and/or permission of instructor.

## PSYC 9990 - Psychology Dissertation (1-20)

The course provides doctoral candidates in Psychology with a process to complete a dissertation research plan. The course learning activities will focus on the completion of a candidate's dissertation. The course is designed to allow advanced doctoral candidates to demonstrate technical mastery of the discipline and to advance knowledge by completing an investigation.
Prerequisite: Admittance to the UNO Doctoral Program in Psychology, successful completion of doctoral coursework and doctoral comprehensive examinations, approval of the chair of the dissertation supervisory committee and advancement to candidacy.

## RELI - Religion

## RELI 4050 - Religion in Early America (3)

This course examines the history and nature of religion in North America to c. 1770 with an emphasis on the British colonies.

Prerequisite: Undergraduate: junior or senior standing. Graduate: graduate student enrolled in History MA program. Crosslisted as: HIST 8016 and HIST 4010.

RELI 8156 - Judaism in the Modern Age (3)
A critical investigation of Judaism since the Enlightenment emphasizing historical, intellectual and religious-legal developments. Pivotal movements (e.g., Hassidism, Reform, Historical Conservative Judaism, Modern Orthodoxy, Zionism) and major historical events (e.g., the American and French Revolutions, Tsarist oppression, the Holocaust and the establishment of the State of Israel) will be analyzed for their ongoing impact.
Prerequisite: For RELI 4150: Junior, three hours in religion, or permission of instructor; For RELI 8156: nine hours in religion or permission of instructor. Crosslisted as: RELI 4150.

## RELI 8166 - The Holocaust (3)

An interdisciplinary approach in a seminar oriented format discussing various aspects of the most notorious genocide in modern times. The course will explore the history of anti-Semitism, the rise of Nazi Germany and the road to the 'final solution.' It will further explore psychological, sociological and intellectual aspects of the dark side of humanity.

Prerequisite: Undergrad: Junior or instructor permission. Crosslisted as: HIST 4720 and RELI 4160 and HIST 8726.

## RELI 8306 - Existentialism and Religious Thought (3)

A study of existentialism in its theistic (e.g., Kierkegaard) and atheistic (e.g., Sartre) forms, and its impact on recent Jewish and Christian thought.

Crosslisted as: RELI 4300.

## RELI 8426 - Muslims in America (3)

This course is designed to familiarize the student with the multiplicity of Muslim voices in the United States and to examine the myths created through stereotyping and orientalizing. The course will also investigate how Muslims in America form identities as hybrids and transnationals and follows the chronological development of American Muslims including their identity construction, religious issues, and politics.

Prerequisite: Graduate Standing.

## RELI 8900 - Readings in Religion (1-6)

An individually organized program of readings pertinent to one or more topics subordinate to the heading of Religion. To be carried out under the supervision of a member of the graduate faculty. May be repeated twice for credit.
Prerequisite: Graduate, permission of instructor, and no incompletes outstanding.

## RLS - Recreation-Leisure Study

## RLS 8000 - Special Studies in Recreation and Leisure

 Studies (1-3)A series of intensive courses especially designed for (1) practitioners within recreation, parks and leisure services and/or (2) candidate majors within recreation and leisure studies; scheduled as seminars or workshops, according to purpose.
Prerequisite: Graduate.

## RLS 8050 - Seminar in Recreation Therapy (3)

Seminars especially designed for recreational therapy majors within recreation and leisure studies and or practitioners within therapeutic recreation and leisure services.

Prerequisite: Graduate standing.

## RLS 8060 - Perspectives of Leisure Education (3)

A survey approach which will focus on an awareness and understanding of leisure values, lifestyles, contributions, and basic concepts associated with the clinical application of leisure education.

Prerequisite: Graduate standing and permission of the instructor.

## RLS 8080-RT: Clinical Assessment, Evaluation \& Research Priorities (3)

An overview of the role of assessment, evaluation and research and their relevance to the priorities of the field of recreational therapy (RT). A seminar approach that will include historical and philosophical concepts as well as practical experience related to these areas. Special attention will be given to implications for developing a comprehensive understanding of the roles that assessment and evaluation play in the research process in providing information about RT efficacy and outcomes. The course will also provide the candidate an opportunity to develop a research agenda that is consistent with current recreation therapy efficacy needs.
Prerequisite: Graduate standing.

## RLS 8246 - Recreation Administration (3)

Designed to provide a background of information on public, private and commercial recreation with special attention to organization, promotion, and development from the administrative aspect.

Prerequisite: At least nine hours of upper division courses in recreation or permission of instructor. Crosslisted as: RLS 4240.

## RLS 8306 - Recreation Programming and Leadership (3)

An advanced study of recreational programming and planning through practical applications. Emphasis is upon understanding proven programming and leadership knowledge and skills, understanding participant leisure behavior, understanding participant leisure needs, and skill development in ways through which organizations, agencies and businesses create service to respond to the leisure needs of the consumer.

Prerequisite: Junior or Senior standing. Crosslisted as: RLS 4300.

## RLS 8406 - Travel and Tourism (3)

This course is designed to provide the recreation major or practitioner, and other interested candidates, with an awareness of the major components of the travel and tourism industry, including its costs and benefits to a resident community.

Prerequisite: Graduate: GPA 3.0 or above; undergraduate: 2.5 GPA. Crosslisted as: RLS 4400.

## RLS 8420 - Leisure, Play and Human Development (3)

An examination of leisure and play as conditions of human development, reflections of human development, and as buffers for adjusting to age-related life events. These three foci will be considered in relationship to the entire life span, and implications will be drawn for recreation and leisure services.

Prerequisite: Graduate.

## RLS 8426 - Recreation Therapy: Intervention for the Aging (3)

Role of leisure services as related to understanding and working with elders. Emphasis on recreation programming as a mode of intervention. Analysis and study of the phases of aging, with reference to psychomotor, affective, and cognitive changes; introduction to the theories of aging and how they relate to the lifestyle of this population; recreational therapy intervention, activity adaptation and program design; leisure education and issues and trends.

Prerequisite: None. Crosslisted as: GERO 4420 and GERO 8426 and RLS 4420.

## RLS 8536 - Recreational Therapy Interventions in Physical Medicine (3)

An in-depth study of physical disabilities as related to recreational therapy settings; includes services, implications of disability, self-help skills, wheelchair sports and activities, rule modifications in competitive sports, safety concerns, legislation and adaptive techniques.
Prerequisite: No prerequisites. Crosslisted as: RLS 4530.
RLS 8560 - Clinical Internship in Recreation Therapy (6)

This course is structured as a full-time ( 40 hrs wk 14 wks ) fieldwork experience in Recreational Therapy. The candidate works under the supervision of a Certified Therapeutic Recreation Specialist in an agency hospital institution setting. The nature of the placement and makeup of the clients/patients seen will vary with each individual candidatel's professional objectives.
Prerequisite: At least three upper division undergraduate and or three graduate courses in recreation therapy.
RLS 8616 - RT Program Design and Leadership (3)
An in depth systematic application of the program planning process and evaluation in recreation therapy service delivery in various human service settings (models) through the utilization of case studies. The focus of the approach is on the elements of the Therapeutic Recreation Process which incorporates assessing, planning, implementing and evaluating. The process is basic to the development of individual/group plan or program.

Prerequisite: Permission of instructor. Crosslisted as: RLS 4610.

## RLS 8636 - RT Activity Analysis, Modification, and Interventions (3)

This course is intended to provide candidates with an understanding of intervention strategies and therapeutic approaches, and an opportunity to apply individual and group facilitation techniques used by the recreational therapy specialists within the health care delivery system. It will also facilitate the development, maintenance, and expression of an appropriate leisure lifestyle for individuals with social, cognitive, emotional and physical limitations.

Prerequisite: RLS 3500 or permission of instructor. Crosslisted as: RLS 4630.

## RLS 8646 - Critical Thinking Recreational Therapy (3)

Examination of conceptual, theoretical, and practical issues associated with the organization and delivery of TR services. Course uses a combination of lectures, readings, oral and written exercises through which candidates reflect on and develop informed positions on core values and beliefs that support the profession, as well as develop a plan of action for on-going professional development. Candidates develop a plan of action for on-going professional development during academic program and beyond.

Prerequisite: Permission of instructor. Crosslisted as: RLS 4640.

## RUSS - Russian

## RUSS 8946 - Russian Masterpieces (3)

Russian literature in translation. Critical study of artistic achievements, thought, and values of modern Russian culture through analysis of representative literary texts by major Russian 19th and 20th century writers.

Prerequisite: Junior or permission. Crosslisted as: RUSS 4940.

## SOC - Sociology

## SOC 8010 - Sociological Theory I (3)

First of two theory courses required of all master's degree candidates in sociology. The course emphasizes the theoretical issues associated with sociological processes of modern societies: urbanization, industrialization, bureaucratization and the emerging world order. Student writing skills as well as the conceptual and historical setting of major theorists who deal with these processes are emphasized.

Prerequisite: Graduate; permission of instructor if outside department of sociology anthropology.

## SOC 8020 - Sociological Theory II (3)

The second of two theory courses required of all master's degree candidates in sociology. The course emphasizes central theoretical and conceptual issues within sociological theory. Student writing skills as well as the conceptual materials will be emphasized.

Prerequisite: Graduate; permission of instructor if outside department of sociology anthropology.
SOC 8026 - Collective Behavior (3)
Group and individual processes of ephemeral social action and institution formation are studied. The development of transitory groups and ideologies in new movements and organizations through opinion formation; case and comparative investigations of the origins and growth of collective movements are made and relevant social theories are applied.

Prerequisite: For 8026, permission of instructor.
Crosslisted as: SOC 4020.

## SOC 8030 - Research Methods I (3)

This course is one of two in research methodology required of departmental graduate students. It gives a broad, intermediate-level coverage to social science research methodology, with an emphasis on the logic of research procedures. Topics covered include the relationship of theory and research, causal analysis, sampling, experimental design, methods of data production and introduction to computer usage.

Prerequisite: Graduate, a course in Statistics and Methods and permission of instructor.

## SOC 8040 - Research Methods II (3)

The second of two courses required of departmental majors in graduate work, and covers topics in intermediate statistics applied to behavioral research. Topics include a review of basic statistics, simple and multiple regression, analysis of variance, path analysis, and more advanced topics as time permits. Appropriate computer packaged programs are utilized.
Prerequisite: SOC 8030 or equivalent, and permission of instructor.

## SOC 8080 - Theories of Family (3)

A core course in sociology and anthropology of the family. Gender and kinship systems are analyzed in the comparative study of family institutions and relationships. In addition to substantive material on the family in various socieities, the course covers theoretical perspectives on the family and the history of family studies in sociology and anthropology.

Prerequisite: Enrollment in the graduate program in sociology or permission of the instructor.

## SOC 8100 - Social Inequality (3)

A core course in societal inequality. The course covers major issues in social inequality focusing on: historical origins; contemporary empirical analyses; contemporary theoretical positions and debates; and international dimensions of social inequality.

Prerequisite: Enrollment in the graduate program in sociology or permission.

## SOC 8106 - The Community (3)

A basic course in community sociology. Sociological theory and the techniques of empirical research are applied to published studies of communities in the United States and elsewhere. The comparative social scientific method is elaborated as it pertains to data derived from community investigation.

Prerequisite: For 8106, permission of instructor. Crosslisted as: SOC 4100.

## SOC 8110 - Social Problems of the Disadvantaged (3)

A survey of the social problems existing in disadvantaged communities. The effects upon individuals of such settings. The subculture of poverty.

Prerequisite: Graduate and permission of instructor.
SOC 8120 - Seminar in Social Gerontology (3)
A topical seminar focusing on the sociology of aging. Students are encouraged to develop proposals for research, programs or social policy. Focus is upon generational differences and age changes throughout the adult life.

Prerequisite: Permission of instructor.

## SOC 8136 - Sociology of Deviant Behavior (3)

A theoretical analysis of the relation of deviant group behavior and subcultures to community standards of conventional behavior as expressed in law and norms.
Prerequisite: For 4130, nine hours of sociology including SOC 1010. For 8136, permission of instructor. Crosslisted as: SOC 4130.

## SOC 8146 - Urban Sociology (3)

Examines urban theoretical perspectives, urbanization processes, the diversity of metropolitan communities, urban stratification, metropolitan growth, urban neighborhoods, community power and urban policy and planning.
Prerequisite: For 8146, permission of instructor. Crosslisted as: SOWK 4140.

## SOC 8156 - American Family Problems (3)

The course takes up problems and issues of the contemporary American family. Specific topics vary, but might include: family violence; the impact of poverty and
racism on families; families and work; gender roles; divorce and its aftermath, remarriage and step-parenthood; family and economy; law and the family; parenting; sexuality, sexual orientation, and reproduction; family policy; drug, alcohol and mental health problems; and the most basic question of all: what is a family? Family problems and issues are presented in a historical and analytical context which connects the family to basic social institutions and processes.

Prerequisite: 6 hours graduate or undergraduate social science or permission of instructor. Permission will be based on social science background and/or enrollment in a relevant graduate program. Crosslisted as: SOC 4150.

## SOC 8200 - Society \& Health (3)

The course provides a critical sociological understanding of health, illness, healing, and medical care within a social context. The focus ranges from examining health and illness behavior and patient-provider interaction to issues addressing the social organization of health care and medicine.

Prerequisite: Enrollment in sociology graduate program or permission of the instructor.

## SOC 8256 - Latino Migration in the World Economy (3)

The course covers major issues related to : 1) the politicaleconomic and socio-cultural factors that have shaped Latino migration streams historically and in today's world economy and, 2) contemporary empirical methodologies and findings related to the causes and multiple socioeconomic costs and benefits of migration streams for immigrants as well as 'sending' and 'receiving' communities.

Prerequisite: Enrollment in the Sociology graduate program or permission of the instructor. Crosslisted as: SOC 4250.

## SOC 8416 - Advanced Qualitative Methods (3)

This course familiarizes students with contemporary qualitative methodologies and techniques by which the social sciences explore social and cultural relations in natural settings. Students will conduct individual and or group field projects.
Prerequisite: Permission of instructor. Crosslisted as: SOC 4410.

## SOC 8506 - Law, the Family and Public Policy (3)

This course analyzes law and public policy affecting the family in a variety of areas, which include: family violence; divorce, child custody, and child support; reproductive technology, contraception, and abortion; unmarried couples' and parents' rights; welfare; care and support of the aged; rights of parents to determine education and health care of their children; adoption and
foster care, etc. New policy proposals and likely changes in law are considered, as well as the process of policy formation and legal change. The role of the professional in this system, including legal regulation and ethical issues, is considered.

Prerequisite: Six hours social science or human services or permission. Crosslisted as: SOC 4500.

## SOC 8550 - Organizational Culture (3)

As a core course in sociology of organizations, this course provides a sociological understanding of the processess of cultural formation as well as the nature of cultures within organizations. Emphasis will be placed on the roles of organizational culture and subcultures to organizational processes.

Prerequisite: Graduate standing, graduate certificate enrollment or permission.

## SOC 8600 - Seminar in Social Organization (3)

Assigned reading, discussion, specialized individual work leading to the writing and presentation of a paper applicable to a general topic in social organization selected by the instructor. As seminar topics change, this course may be repeated in a student's program without implying duplication.

Prerequisite: Permission.

## SOC 8626 - Sociology of Formal Organizations (3)

Examines organizational theory and research. Analyzes organizational problems such as goals and effectiveness; authority, leadership and control; professionals in organizations; communications; clients; organizational change; and organizations and their environments. Comparative analysis of many types of organizations such as business, industry, schools, prisons and hospitals with special attention given to human-service organizations.
Prerequisite: Permission of instructor. Crosslisted as: SOC 4620.

## SOC 8650 - Seminar in Occupations and Professions (3)

Assigned reading, discussion, specialized individual work leading to the writing and presentation of a paper applicable to the sociology of occupations and professions. Questions relating to theory, research and practical application are considered.
Prerequisite: Graduate and permission of instructor.

## SOC 8700 - Seminar in Sociological Theory (3-6)

Assigned reading, discussion, specialized individual work leading to the writing and presentation of a paper applicable to a general topic in sociological theory selected by the instructor. As seminar topics change, this course may be repeated in a student's program without implying duplication.

Prerequisite: Permission.

## SOC 8706 - Women's Health and Issues of Diversity (3)

This course provides a critical understanding of the interrelationship between socio-cultural, economic, and political factors and women's physical and mental health. The aim is to provide an overview of the experience with the health care system. Emphasis will be on critically examining recent scholarship from a sociological, behavioral, health policy perspective.

Crosslisted as: HED 8706 and SOC 4700 and HED 4700.

## SOC 8756 - Social Change and Globalization (3)

A historical and comparative review of theories, models, and political ideologies of social change. Topics include the globalizaton model of social change and the role that governments, transnational corporations, multilateral agencies, and local groups and organizations play today in creating and responding to social change.
Prerequisite: For 8756, permission of instructor. Crosslisted as: SOC 4750.

## SOC 8806 - Contemporary Topics in Sociology (3)

This course reviews research and writing in an area which is of current interest in the field of sociology. The specific topic(s) to be covered will be announced at the time the course is being offered. Since the topic will vary, students may elect to take this course more than once.
Prerequisite: Permission. Crosslisted as: SOC 4800.

## SOC 8826 - Team Research Seminar (3)

Students participate in a semester-long class research project. Students will be involved in all stages of research: problem formulation, literature review, research design, measurement construction, data collection, data analysis, report writing and presentation of findings. The project's focus will vary, but it may often involve issues confronting Omaha, a particular organization or a specific group of people.

Prerequisite: Permission of instructor. Crosslisted as: SOC 4820.

## SOC 8836 - Sociology of Mental Illness (3)

The sociological perspective on mental illness is contrasted with other perspectives. The course covers the conceptualization of mental illness, epidemiology and etiology; the role of the family; 'careers' of mental illness; the mental hospital; the patient-therapist relationship and therapeutic modes; mental health professionals; community health; and legal issues.
Prerequisite: Six hours social science or permission of instructor. Crosslisted as: SOC 4830.

## SOC 8856 - Sociology of Religion (3)

Analysis of religious behaviors from a sociological and social- psychological perspective and utilizing both theoretical and empirical materials. The class is designed as an introductory approach to the sociology of religion, and the first in a two-step sequence, undergraduate and graduate.

Prerequisite: For 8856, permission of instructor. Crosslisted as: SOC 4850.

## SOC 8950 - Practicum in Applied Sociology (3)

A practical work experience under supervision which provides opportunity for applying principles from the student's academic area of concentration.

Prerequisite: Graduate sociology major for the MS degree.

## SOC 8960 - Practicum in Applied Sociology (3)

A practical work experience under supervision which provides opportunity for applying principles from the student's academic area of concentration.

Prerequisite: Graduate sociology major for the MS degree.

## SOC 8990 - Thesis (1-6)

SOC 8996 - Independent Study (1-3)
May be repeated with permission of the chairperson of the Graduate Committee. Guided reading in special topics under the supervision of a faculty member.

Prerequisite: For 8996, permission of instructor. Crosslisted as: SOC 4990.

## SOC 9110 - Applied Social Gerontology (3)

An overview of social gerontology with an emphasis on the interplay between social, psychological and physical elements in later life. Restricted to graduate students only; required of Gerontology students.

Prerequisite: Graduate. Crosslisted as: GERO 9110.

## SOWK - Social Work

## SOWK 4510 - Treatment Issues in Chemical

 Dependency (3)This course addresses chemical dependency treatment issues including denial, minimization, relapse and its prevention, resistance, family dynamics, poly-substance abuse, co-occurring disorders, spirituality and the influence of self-help groups. The education will include the clinical treatment needs of individuals suffering from chemical dependency, taking into consideration diversity, gender, culture and lifestyle.

Prerequisite: Admission to counseling program or social work programs or permission of instructor. For social work students, SOWK/COUN 4680/8686 (Medical and

Psychosocial Aspects of Alcohol/Drug Use and Addiction and SOWK/COUN 4690/8696 (Assessment and Case Management in Substance Abuse) must be taken prior to COUN/SOWK 4510/8516. Crosslisted as: COUN 8516 and COUN 4510 and SOWK 8516.

## SOWK 4680 - Medical and Psychosocial Aspects of Alcohol/Drug Use and Addiction (3)

This course introduces students to substance abuse disorders and their impact on the individual, family, and society. It covers psychopharmacology, alcohol and drug interactions, drug classifications, theories of chemical dependency, various models of treatment, vulnerable populations, and ethical and legal issues.
Prerequisite: Undergraduate: Admission to the BSSW program or permission of the School. Graduate: Admission to the MSW program or permission of the School. Open to those admitted to the Counseling program or by permission. Crosslisted as: COUN 8686 and SOWK 8686 and COUN 4680.

## SOWK 4690 - Assessment and Case Management in Substance Abuse (3)

This course focuses on assessment of clients and their environment, and diagnosis and referral for substance abuse treatment. Emphasis is given to assessment instruments, treatment levels, treatment planning, case management, and social justice.
Prerequisite: For Social Work students: Undergraduate: Admission to the BSSW program or permission of the School and SOWK/COUN 4680 (or equivalent course) prior to or concurrent. Graduate: Admission to MSW program or permission of the School and SOWK/COUN 8686 (or equivalent course) prior to or concurrent. For Counseling students: Admission to the program or by permission. Crosslisted as: COUN 8696 and SOWK 8696 and COUN 4690.

## SOWK 8070 - Human Behavior and the Social Environment I (3)

This course covers the major contributions of theories from the biological, behavioral and social sciences relevant to understanding human functioning across the lifespan, particularly infancy through adolescence, within the social environment at the micro- and macro-level (e.g., individuals, families, groups, organizations, institutions, and communities) as they relate to effective generalist social work practice.

Prerequisite: Admission to the MSW program and undergraduate human biology content.

## SOWK 8080 - Human Behavior and Social Environment II (3)

This course covers the major contributions of theories from the biological, behavioral and social sciences relevant to
understanding human functioning across the life span, particularly young adulthood through late adulthood within the social environment at the micro- and macro-level (e.g., individuals, families, groups, organizations, institutions, and communities) as they relate to effective generalist social work practice.

Prerequisite: SOWK 8070.

## SOWK 8090 - Social Welfare Policy (3)

This course is an introduction to social welfare policy analysis. The course examines social welfare policy taking into account historical, political, economic, social, and cultural perspectives. Basic concepts and choices are examined in relation to values, ethics, context, social functioning and social consequences.

Prerequisite: Admission to the MSW program.

## SOWK 8110 - Institutional Oppression (3)

This course is about institutional racism, sexism and classism as it relates to social policy and social injustice. The focus is on how institutional oppressions are related and are mutually reinforcing. The consequences of institutional racism, sexism and classism are examined at the individual, group, family, and agency levels.

Prerequisite: Admission to MSW Program or permission of the School of Social Work.

## SOWK 8130 - Generalist Practice I (3)

This course provides an introduction to the values, ethics, knowledge, and skills of generalist social work practice. Using constructs from the Generalist Intervention Model, systems theory, and the strengths-based perspective, students learn about engagement, assessment, planning and contracting, intervention, evaluation, and termination. Diversity and case management are emphasized as part of bringing planned change to client systems, including individuals and families.

Prerequisite: SOWK 8070 prior to or concurrent.

## SOWK 8150 - Generalist Practice II (3)

This practice course is an introduction to a goal-oriented planned change process with an emphasis on educational, support, and task groups, organizations, and communities. The focus is on building knowledge and developing indirect practice skills in collaboration, planning, empowerment, and advocacy to effect social change using the Generalist Intervention Model.

Prerequisite: SOWK 8130 prior to, and SOWK 8080 prior to or concurrent.

## SOWK 8160 - Generalist Social Work Practicum I (3)

This course is designed to provide supervised, individual and experiential learning offered within the setting of a selected social service agency. The student will be
introduced to a variety of social work practice roles, develop professional relationships with client systems and learn to apply different interventions to effect change across the life span. In order to facilitate integration of classroom theory with practice, students will attend a seven-week practicum seminar ( 2 hours per week).

Prerequisite: Prior: (deficiencies determined at admission) grad/undergrad research and grad/undergrad statistics, and permission of the School. Prior to or concurrent: SOWK 8070, SOWK 8090, and SOWK 8130.

## SOWK 8170 - Generalist Social Work Practicum II (3)

This course is designed to provide supervised, individual, experiential learning offered within the setting of a social service agency, typically the same agency as in SOWK 8160. This course builds upon opportunities provided and competence achieved in Generalist Social Work Practicum I.

Prerequisite: SOWK 8160, SOWK 8080, SOWK 8110, and SOWK 8150 prior to or concurrent.

SOWK 8190 - Research \& Computer Applications (3)
This course focuses on the use of research and computer programs in social work practice. Social and behavioral science research methods are reviewed. Students learn to analyze existing data using SPSS and to write an empirical research report. The use of Microsoft Word, Excel, and PowerPoint in social work practice are explored.

Prerequisite: Undergraduate or graduate research course, undergraduate or graduate statistics course.

## SOWK 8220 - Clinical Social Work with Individuals (3)

This advanced course provides an in-depth study of several theories of personality and behavior, and of therapeutic approaches derived from the theories. Major focus is on therapy with individuals across the lifespan, but application to family systems is also considered, as well as the fit of each theory within the broader social systems framework.

Prerequisite: SOWK 8160 or admitted as an Advanced Standing student.

## SOWK 8230 - Clinical Social Work with Groups (3)

This advanced course provides knowledge of and experience in working with groups as systems. It includes both assessment of dynamics as well as developing skills in intervention modalities appropriate for working with various types of groups.

Prerequisite: SOWK 8220 and permission of the School.

## SOWK 8240 - Social Work Practice with Children (3)

This advanced practice course provides an overview of several social work interventions used with children and adolescents. A brief review of normal child development
and the family life cycle is the context for presenting a range of children's problems and special needs. The course will cover several intervention models and address their application in various service settings and in individual, family, group, and social action formats. Children in diverse family settings, institutions, and in minority families and cultures are considered to understand unique therapeutic issues present for them.
Prerequisite: SOWK 8220.
SOWK 8250 - Social Work Practice with Families (3)
This course considers the family context as a system for therapeutic intervention. The family unit and its diverse forms are defined; theories for assessment and understanding family's interactions across the lifespan are considered, and the alternative modalities useful for treating family dysfunction are presented. As a practiceoriented course, it emphasizes the development of professional skills in working with the family across the lifespan.

Prerequisite: SOWK 8220 and permission of the School.

## SOWK 8260 - Social Work Practice with Older Adults

 (3)This course in the advanced social work practice curriculum focuses on micro- and macro-level practice skills essential to effective social work practice with older adults. This course emphasizes clinical interventions that focus on individuals and small groups as well as community practice skills that involve social marketing and community organizing, networking, and collaborating with community professionals.

Prerequisite: SOWK 8220.

## SOWK 8270 - Social Work Practice with Sexual

 Concerns (3)This course provides a survey of the current knowledge base, theory and research in human sexuality with a focus on advanced practice intervention and prevention approaches for a variety of sexuality issues faced by individuals, couples, and families throughout the lifespan.
Prerequisite: SOWK 8220.

## SOWK 8280 - Social Work Practice with Couples and Changing Family Structures (3)

This is an advanced practice course designed to prepare students to provide therapy for couples and families at all life stages who are experiencing problems in intimacy, marital, divorce, or remarriage adjustment.

Prerequisite: SOWK 8220.

## SOWK 8290 - Social Work Practice in Health and Mental Health (3)

This course emphasizes the development of advanced level clinical and social work practice skills for working with selected acute and chronic health and mental health conditions affecting individuals across the life cycle.

Prerequisite: SOWK 8220 and permission of the School.

## SOWK 8300 - Advanced Social Work Practice in Health Settings (3)

This advanced course provides an in-depth study of the practice of Social Work with individuals and families in health care settings. As a practice-oriented course, emphasis is placed upon the development of professional skills. The student will learn to apply interventions from a variety of modalities to the specific concerns of patients and significant others. Both micro and macro aspects of intervention will be considered, as well as the unique needs of minority groups.
Prerequisite: SOWK 8650, SOWK 8220 and permission of the School.

## SOWK 8400 - Advanced Social Work Practicum I (3)

This course is designed to provide supervised, individual professional learning experiences offered within the setting of a selected social service agency in the student's chosen concentration. The student will be introduced to a variety of advanced direct and indirect social work practices.
Prerequisite: SOWK 8190, SOWK 8220, and permission of the School.

## SOWK 8410 - Advanced Social Work Practicum II (34)

This course is designed to provide supervised, individual professional learning experiences offered within the setting of a social service agency in the student's chosen concentration, typically the same agency as in SOWK 8400. This course builds upon opportunities provided and competence achieved in Advanced Social Work Practicum I.

Prerequisite: SOWK 8400 prior to or concurrent.
SOWK 8420 - Advanced Social Work Practicum III (13)

This course is designed to provide a third supervised, individual professional learning experience offered within the setting of a social service agency in the student's chosen concentration. This course builds upon opportunities provided and competence achieved in Advanced Social Work Practicum II.

Prerequisite: SOWK 8410 prior to or concurrent, and permission of the School.

## SOWK 8510 - Supervision and Personnel

 Administration (3)This course is an introduction to the administration of social welfare programs in the areas of clinical supervision, administrative leadership, and personnel practices. It provides a basic understanding for professionals who work in agency settings and a foundation for supervisory and administrative practice. It is expected that those who become administrators will build upon this base with specific legal, technical, and procedural knowledge related to their type of agency and level of responsibility.

Prerequisite: SOWK 8170 or admitted as an Advanced Standing student.

## SOWK 8516 - Treatment Issues in Chemical Dependency (3)

This course addresses chemical dependency treatment issues including denial, minimization, relapse and its prevention, resistance, family dynamics, poly-substance abuse, co-occurring disorders, spirituality and the influence of self-help groups. The education will include the clinical treatment needs of individuals suffering from chemical dependency, taking into consideration diversity, gender, culture and lifestyle.

Prerequisite: Admission to counseling program or social work programs or permission of instructor. For social work students, SOWK/COUN 4680/8686 (Medical and Psychosocial Aspects of Alcohol/Drug Use and Addiction and SOWK/COUN 4690/8696 (Assessment and Case Management in Substance Abuse) must be taken prior to COUN/SOWK 4510/8516. Crosslisted as: COUN 8516 and SOWK 4510 and COUN 4510.

## SOWK 8530 - Social Welfare Planning (3)

This course is an advanced practice course about intervention methods and strategies to bring about social change in relation to public policies and programs at all levels of government, and private sector human service providers, in partnership with and/or on behalf of client groups, oppressed groups and the human needs and rights of all persons.
Prerequisite: SOWK 8170 or BSW degree. This course may be taken prior to or concurrent with SOWK 8510.

## SOWK 8540 - Social Welfare Planning (3)

This course is a macro practice course in social planning in the context of strategic planning and its application to social policy and program change, administrative planning for social services, and planning at the program, agency, and community level.
Prerequisite: SOWK 8170 or admitted as an Advanced Standing student.

## SOWK 8550 - Social Justice and Social Advocacy (3)

This course provides a perspective on national and international social and economic injustices experienced by people under corporate globalization. Practice implications for social workers are addressed.

Prerequisite: SOWK 8170 or admitted as an Advanced Standing student or permission of the School.

## SOWK 8560 - Advanced Community Practice (3)

The course uses a community-based service-learning pedagogy designed to help students develop an analytical and empirical approach to empowering communities. The course builds on the social work "person-in-environment" perspective by focusing on the client system and their environmental contexts as a partner in practice. This course is particularly relevant to direct practice with and advocacy for diverse disempowered groups in society.

Prerequisite: SOWK 8170 or BSW degree.

## SOWK 8570 - Administration of Social Welfare

 Agencies (3)This course is an advanced macro practice course in administration of social welfare agencies and programs which focuses on resource acquisition, leadership, and financial management in public, non-profit, and for-profit social agencies.

Prerequisite: SOWK 8540.

## SOWK 8600 - Permanence for Children (3)

This course is about the child welfare system and focuses on policies, laws, and agency structures designed to help abused and neglected children and their families.
Prerequisite: SOWK 8170 prior to or concurrent, or admitted as an Advanced Standing student.

## SOWK 8610 - Family and Community Violence (3)

This course covers family and community violence across the lifespan with an emphasis on gaining knowledge of the issue, skills in policy analysis, and a broad framework for developing effective services in various service settings.

Prerequisite: SOWK 8130 or admitted as an Advanced Standing student.

## SOWK 8650 - Health/Mental Health Policy for Social Work (3)

This course emphasizes the development of health and mental health policy analysis skills and knowledge for social work students. Major topics include government response to health care, cultural and historical perspectives, service provision, and epidemiological trends across the life span. It provides a framework for clinical interventions in a variety of health and mental health settings.

Prerequisite: SOWK 8130 or admitted as an Advanced Standing student.

## SOWK 8686 - Medical and Psychosocial Aspects of Alcohol/Drug Use and Addiction (3)

This course introduces students to substance abuse disorders and their impact on the individual, family, and society. It covers psychopharmacology, alcohol and drug interactions, drug classifications, theories of chemical dependency, various models of treatment, vulnerable populations, and ethical and legal issues.

Prerequisite: Undergraduate: Admission to the BSSW program or permission of the School. Graduate: Admission to the MSW program or permission of the School. Open to those admitted to the Counseling program or by permission. Crosslisted as: COUN 8686 and SOWK 4680 and COUN 4680.

## SOWK 8696 - Assessment and Case Management in Substance Abuse (3)

This course focuses on assessment of clients and their environment, and diagnosis and referral for substance abuse treatment. Emphasis is given to assessment instruments, treatment levels, treatment planning, case management, and social justice.

Prerequisite: For Social Work students: Undergraduate: Admission to the BSSW program or permission of the School and SOWK/COUN 4680 (or equivalent course) prior to or concurrent. Graduate: Admission to MSW program or permission of the School and SOWK/COUN 8686 (or equivalent course) prior to or concurrent. For Counseling students: Admission to the program or by permission. Crosslisted as: COUN 8696 and SOWK 4690 and COUN 4690.

## SOWK 8700 - Social Work and Addictive Disorders (3)

This course covers addictive disorders and their impact on the individual, family, and society. Focus is on individual characteristics, physiological addictive processes, and family factors. Emphasis is given to prevention activities and formal treatment programs that address alcohol and other drug/substance abuse/addiction, including eating disorders. Also considered are other non-psychosomatic obsessive/compulsive behaviors, e.g., gambling, sex/love, Internet, etc. Attention is given to vulnerable and special populations, the social environment, public policy, ethical and legal issues, and evidence-based interventions..

Prerequisite: Admission to the MSW program.

## SOWK 8886 - Topical Seminar in Social Work (3)

Specific seminar topics will focus on advanced content in social work theory and practice. The course description will be announced when a specific topical seminar is proposed. The topics selected will be consistent with School of Social Work program objectives, faculty
expertise, and student needs. This course may be repeated for up to nine hours credit.

Prerequisite: Undergraduate: SOWK 3320. Graduate: SOWK 8130 or admitted as an Advanced Standing student. Crosslisted as: SOWK 4880.

## SOWK 8900 - Special Studies in Social Welfare (1-3)

This independent study course allows students to pursue a special selected area or topic within social welfare in order to deepen knowledge and/or skills in that particular area.

Prerequisite: Admission to the School, and permission of the School.

## SOWK 8940 - Evaluation of Social Programs (3)

This is an advanced research course in the evaluation of social programs and social agencies which focuses on agency organizational structure, program design and effectiveness, and social impact.
Prerequisite: SOWK 8190 prior to, and SOWK 8540 prior to or concurrent.

## SOWK 8950 - Research Methods in Clinical Practice (3)

This course provides a study of the issues involved in clinical research methodology. Students are introduced to the tools for documenting the effects of clinical practice interventions for individuals, couples, families and groups (including qualitative and quantitative methodologies: single-case design, standardized measurement, self-report data, self-monitoring, case study, grounded theory etc.).

Prerequisite: SOWK 8190 and SOWK 8220.

## SOWK 8960 - Research Other Than Thesis (3)

This course enables students, under faculty supervision, to prepare a research proposal, carry out the study, and prepare a detailed report of the purpose, design, outcome, and significance of the study.
Prerequisite: SOWK 8190 and permission of the School.

## SOWK 8990 - Master's Thesis (3-6)

The Master's thesis provides students the opportunity to acquire first-hand experience in research methods under faculty direction. With the guidance of the thesis coordinator and a supervisory committee, the student prepares a research proposal, conducts the proposed study, and prepares a detailed report of the purpose, design, results, and implications of the findings.
Prerequisite: SOWK 8190 and permission of the School.

## SPAN - Spanish

SPAN 8000 - Any 8000-level Literature course (3)
SPAN 8036 - Advanced Spanish Conversation (3)
Oral practice employing complex and sophisticated conversational structures in formal speeches and discussions of readings.

Prerequisite: SPAN 3030 or departmental permission. Crosslisted as: SPAN 4030.

## SPAN 8046 - Advanced Spanish Composition and Stylistics (3)

Advanced grammatical principles, composition, and stylistics.

Prerequisite: SPAN 3040 or departmental permission, and ENGL 1160. Crosslisted as: SPAN 4040.

## SPAN 8056 - Seminar in Mexican Culture and

 Civilization (3)Resident study in Cuernavaca, Mexico, with emphasis on total immersion in the language; homestays, intensive classroom instruction, and cultural activities. Summer, 4week term, six to eight hours daily.
Prerequisite: SPAN 2120 or departmental permission. Crosslisted as: SPAN 4050.

SPAN 8166 - Latin American Literature of the 20th Century (3)

Critical and analytical study of Spanish-American dramatists, poets, and essayists from modernism to the present.

Prerequisite: SPAN 3220 or departmental permission. Crosslisted as: SPAN 4160.

## SPAN 8186 - Latino Literature and Culture (3)

A study of representative works of Mexican-American, Puerto Rican and Cuban-American writers, along with their cultural and historical antecedents.

Prerequisite: SPAN 3030, 3040, or departmental permission. Satisfies three credit hours of the cultural diversity requirement for Spanish majors and minors. Crosslisted as: SPAN 4180.

## SPAN 8206 - The Structure of Spanish (3)

Study of major Spanish grammatical structures that are problematic to students of Spanish as a second language. Topics cover the following areas: syntax, semantics, morphology and phonology.

Prerequisite: SPAN 3040 or SPAN, FREN, GERM, ENGL 4580/8586, or departmental permisison. Crosslisted as: SPAN 4200.

## SPAN 8226 - The Structure of Spanish (3)

A survey of the linguistic structure of Spanish. Topics include phology, morphology, syntax, and semantics.

Prerequisite: SPAN 3040 and ENGL 3610/8615, or departmental permission; and for SPAN 8226: admission to the Graduate College. Crosslisted as: SPAN 4220.

## SPAN 8246 - Generation of 1898 (3)

Examination of the ideology, philosophy and literary techniques of Unamuno, Martinez Ruiz, Valle-Inclan, Baroja and Antonio Machado.

Prerequisite: SPAN 3180 or departmental permission. Crosslisted as: SPAN 4240.

## SPAN 8356 - Latin American Short Story (3)

Representative stories of the 19th and 20th centuries, from Romanticism to the present.

Prerequisite: SPAN 3210 and 3220 or departmental permission. Crosslisted as: SPAN 4350.

## SPAN 8440 - Seminar: Spanish Composition (3)

This course provides opportunities for students to refine their composition skills in Spanish through extensive writing workshops and peer editing. Computer applications to composition will be employed.

Prerequisite: Admisssion to the Graduate College.
SPAN 8456 - Introduction to Literary Criticism (3)
An introduction to modern literary theory, from Ferdinand de Sausurre's course in general linguistics and Russian formalism, to postmodernism. Theory will be read in English and Spanish. Literature for discussion and analysis will be read in Spanish.
Prerequisite: SPAN 3030, 3040, or permission. Crosslisted as: SPAN 4450.

## SPAN 8556 - Modern Drama of Spain (3)

Ideologies, techniques, trends and influences of modern dramatists of Spain.

Prerequisite: SPAN 3180 or departmental permission. Crosslisted as: SPAN 4550.

## SPAN 8566 - Modern Novel of Spain (3)

Literary movements, influences and techniques of modern novelists from Fernan Caballero to Cela.

Prerequisite: SPAN 3180 or departmental permission. Crosslisted as: SPAN 4560.

## SPAN 8900 - Spanish Independent Study: Graduate

 Only (1-3)Specifically planned projects and readings in a welldefined field of literature or linguistics carried out under
the supervision of a member of the foreign languages faculty holding graduate faculty status.

Prerequisite: Acceptance into the Master of Arts in Language Teaching Program (MALT). Must have completed a minimum of six graduate credit hours.

## SPAN 8906 - Independent Study (1-3)

Specially planned readings in a well-defined field of literature, carried out under the supervision of a member of the foreign language faculty. Designed primarily for the student who has need of work not currently available in the departmental offerings and who has demonstrated capability of working independently. May be repeated for credit once.

Prerequisite: Permission of the instructor, junior or senior standing, and no incompletes outstanding. Crosslisted as: SPAN 4900.

## SPAN 8966 - Pro-Seminar (1-3)

Detailed study of narrower phases of literature, language or culture.

Prerequisite: Departmental permission. Crosslisted as: SPAN 4960.

SPAN 8960 - Study Abroad (3)

## SPCH - Speech

## SPCH 8116 - Rhetorical Theory and Criticism (3)

Rhetorical theory and criticism, emphasizing ways of evaluating oral communication.

Crosslisted as: SPCH 4110.

## SPCH 8136 - Family Communication (3)

This course emphasizes the role of communication in family relationships. Theories, models, and research methods will be used to examine the family in various cultures and contexts (e.g., nuclear families, single-parent families, and blended families). Topics that will be covered in this course include: family conflict, family roles, family stories, family stress, family well-being, genograms, marriage, and divorce.
Prerequisite: For SPCH 4130: The prerequisite for the course is junior standing, and SPCH 2010 or SPCH 2410. For SPCH 8136: Graduate majoring in the School of Communication or permission of instructor.

## SPCH 8146 - Communication and Human

 Relationships (3)This course applies theories of interpersonal processes and communication principles to the study of relationships. Discussion focuses on the communication in different types of relationships and relational stages, e.g., strangers, acquaintances, friendship and intimate.

Crosslisted as: SPCH 4140

## SPCH 8156 - Communication Training and Development Skills (3)

This course exposes students to the process of designing communication training workshops programs. It provides students, especially those who are prospective traininers and or consultants, experiential and cognitive knowledge about needs assessment, adult learning, communication training topics research, objectives writing, module design, interactive delivery methods, and program evaluation.

Prerequisite: Graduate majoring in communication or permission of instructor. Crosslisted as: SPCH 4150.

## SPCH 8166 - Communication for Instructional Settings

 (3)Introduces prospective trainers and or educators to the principles of communication in instructional settings (i.e., classrooms, workshops, training seminars). Provides theoretical and experiential knowledge about communication goals objectives, student trainee communication needs expectations, reinforcement feedback, climate influence, and teacher trainer communicator style, characteristics, behavior.
Prerequisite: Graduate majoring in communication or permission of instructor. Crosslisted as: SPCH 4160.

SPCH 8176 - Organizational Communication (3)
Exposure to various theoretical approaches and methods for understanding communication processes in organizational settings. Application of these approaches methods to the analysis and resolution of problematic situations in organizations.
Crosslisted as: SPCH 4170.

## SPCH 8186 - Communication Leadership and Power in Organizations (3)

Introduces students to the role of communication leadership and power in organizations. Provides theoretical and experiential knowledge about such topics as communication leadership styles and tactics, superior subordinate communication and power, ethical responsibilities, and diversity gender issues related to communication leadership.

Prerequisite: Graduate majoring in communication or permission of instructor. Crosslisted as: SPCH 4180.

## SPCH 8196 - Computer-Mediated Communication (3)

Computer-Mediated Communication addressing emerging issues of virtual communities, identity, civic life and participation, online relationships, collaborative work environments, digital networks, gender race class issues, legal and ethical considerations of technology, and commodification of mediated communication.

Prerequisite: Graduate standing. Crosslisted as: SPCH 4190.

## SPCH 8226 - Health Communication (3)

This course introduces students to the interdisciplinary field of health communication. In this course, students will learn various theories of health communication as well as current research and trends in health communication and its related fields. To speak to the complexity and dynamism of health communication, this course will expose students to the multiple voices and perspectives involved in the delivery of health and healthcare.

Prerequisite: None. Crosslisted as: SPCH 4220.

## SPCH 8516 - Persuasion (3)

Basic principles and psychological processes underlying persuasive communication; a review of various source, message, channel and receiver variables and their influence on communication effectiveness.

Crosslisted as: SPCH 4510.

## SPCH 8526 - Psycholinguistics (3)

A discussion of the literature concerned with how such psychological variables as perception, learning, memory and development relate to the linguistic variables of sentence structure, meaning and speech sounds.

Crosslisted as: SPCH 4520.

## SPCH 8536 - Intercultural Communication (3)

The intent of this course is to examine the concepts of cross-cultural communication. Theory and research are integrated with application and necessary skills are identified and developed.

Crosslisted as: SPCH 4530.

## SPCH 8546 - Contemporary Systems of Communication (3)

An adaptation of General Systems Theory concepts to the study of human communication processes with emphasis on systems analysis of contemporary interpersonal communication perspectives.

Crosslisted as: SPCH 4540.

## SPCH 8556 - Nonverbal Communication (3)

This course is designed to familiarize the student with current theory and research about nonverbal communication and to provide a variety of practical experiences through which the student can analyze and evaluate his or her own nonverbal behavior and that of others.

Crosslisted as: SPCH 4550.

## SPCH 8606 - Communication Theory (3)

Exposes students to theories that cut across the traditional sub-disciplines of the field of communication: mass, organizational, small group, interpersonal and public rhetorical. Also discusses principles that will assist students in identifying strengths and weaknesses of the theories to which they are exposed.

Prerequisite: Graduate majoring in communication or instructor permission. Crosslisted as: SPCH 4600.

## SPCH 8626 - Directing Forensics (3)

To provide students planning to teach speech in high school or college with a philosophy and detailed knowledge of how to direct a forensic program.
Crosslisted as: SPCH 4620.

## SPCH 8706 - Interpersonal Conflict (3)

This course provides an overview of interpersonal conflict processes. It examines perspectives on conflict, patterns of constructive and destructive conflict, conflict styles and tactics, interpersonal power, negotiation strategies, conflict assessment, and conflict skill development.

Prerequisite: Graduate major in communication or instructor permission. Crosslisted as: SPCH 4700.

## SPCH 8806 - Conflict Mediation (3)

This course develops knowledge of mediation theory, research, and practice and communication skills essential to the effective mediation of disputes in various contexts.

Prerequisite: Graduate major in Communication or instructor permission. Crosslisted as: SPCH 4800.

## SPCH 8110 - Seminar in Modern Public Address (3)

SPCH 8560 - Communication Teamwork and Facilitation (3)

## SPED Special Education Communication Disorders

## SPED 8000 - Special Projects (1-3)

This course is designed to allow graduate candidates to pursue independent study of a topic under the direction and guidance of a faculty member. Topics studied and the nature of the learning activities is mutually agreed upon by the candidate and instructor. This course will prepare graduate candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Permission by the instructor.

## SPED 8030 - Teaching Students with Exceptionalities (3)

This course is designed to describe the characteristics and learning styles of students with various exceptional learning needs. This course also is intended to provide candidates with a knowledge base for the foundation of special education including the basic procedural flow of referral, identification and instruction and strategies for modifying the learning environment and individualizing instruction. This course will prepare candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: Graduate standing.

## SPED 8046 - Workshop in Special Education or Speech Pathology (1-6)

The purpose of this course is to provide workshops or special seminars in the area of special education and communication disorders. This course will prepare graduate candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: Undergraduate candidates must have a GPA of 2.5 or higher and permission. Graduate candidates must have graduate status and permission. Crosslisted as: SPED 4040.

## SPED 8100 - Research Projects (1-3)

The purpose of this course is to allow candidates to participate in research activities other than those related to the thesis. Specific course content and type of research will be dependent on the nature of the intended research and must be approved by the supervising advisor and Department Chair prior to registration.
Prerequisite: Graduate standing and admitted into a special education or speech-language pathology program of study.

## SPED 8120 - High Incidence Disabilities (3)

This introductory course is designed to examine characteristics of learners with high incidence disabilities and the impact of those characteristics on learning. The focus will be on the manifestation of disabilities including learning disabilities, behavior disorders, mild to moderate intellectual disabilities, speech and language disorders, attention-deficit hyperactivity disorders, and autism spectrum disorders. These topics are intended to prepare candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: Graduate Standing.

## SPED 8200 - Speech \& Language Development and Early Intervention with the Infant or Toddler who is Deaf or Hard of Hearing (3)

This course will examine current research in the development of language and communication in young children. Observations and discussion of language communication behavior in children, $0-3$, will be integrated with research information. Implications of hearing loss in the 0-3 age range of the development of language and speech will be investigated. The early bond between language and literacy will be examined and practical application of this information will be applied to the use of literature for infants and young children.
Prerequisite: Graduate, permission.

## SPED 8226 - Teaching Speech to the Deaf/Hard of Hearing (3)

This course will provide an investigation of the speech skills of the deaf/hard of hearing child, preschool through high school. Current theories and practices in teaching speech will be examined. This course will also present methods for assessing speech problems in deaf/hard of hearing children, making the necessary adaptations and modifications, and integrating technology. The course will prepare pre-service candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: 2.5 GPA minimum; EDUC 2510, 2520; SPED 4420; Non majors may be admitted by permission of the instructor. Crosslisted as: SPED 4220.

## SPED 8236 - Language Development and Disorders for Teachers (3)

This course is designed to introduce the candidate to the nature and structure of language, current theories of language, normal first and second language development, language disorders, multicultural issues in language assessment, and contemporary classroom management of language deficits. The topics will be examined from an educational perspective to enhance the teachers knowledge of language and to facilitate classroom management of language deficits exhibited by exceptional children in grades pre-K through 12. The course will prepare special education candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Undergraduate: GPA=2.5 or better, EDUC 2510 and EDUC 2520; Graduate: admitted to Graduate College. Crosslisted as: SPED 4230.

## SPED 8240 - Language Disorders in School-Age Children (3)

This course is designed to provide candidates with knowledge about communicative disorders in children beyond age 5 and adolescents, within a multicultural and
global framework. It will cover assumptions underlying current approaches to the assessment and management of language disorders during school age and adolescent years. The influence of later language problems and the relation to school performance will be addressed.

Prerequisite: Graduate standing and a course in later (school age) language development.

## SPED 8280 - Audiological Implications in Education of the Deaf Hard of Hearing (3)

This course will examine audiological assessment, the audiological impacts of hearing losses, and how technology can be a tool for remediating the effects of hearing losses in very young children. Attention will be given to measurement techniques, cochlear implants, amplification, assistive listening devices, and training children how to listen and learn using auditory input.
Prerequisite: SPED 4370 or equivalent; Permission.

## SPED 8290 - Speech, Language and Literacy Development in the 3-8 Year Old Child Who is Deaf or Hard of Hearing (3)

This course will continue the examination of language, speech, and literacy development in children who are three to eight years of age. The impact of hearing loss in these areas will be investigated. Examination of current research, principles of speech and language assessment, and implications and strategies for programming will be included.

Prerequisite: Admission to the Graduate College. A course in normal language development is helpful, but not required.

## SPED 8350 - Curriculum Development and Adaptation for Deaf and Hard of Hearing Children from Birth to Eight Years of Age (3)

This course will examine the necessary language, audition, and literacy curricula used in auditory/oral approaches for deaf and hard of hearing children from the ages of birth to eight years. Examination and practice of current teaching methods, service delivery models, and teaching standards will be included.

Prerequisite: Permission, SPED 8200 and SPED 8290.

## SPED 8396 - Hearing Science (3)

This course is designed for undergraduate majors in speech-language pathology and audiology and for graduate candidates in education of the deaf/hard of hearing. The course will include basic terminology, anatomy and physiology of the hearing mechanism, acoustics and physics of sound, the processes of human hearing, elements of basic hearing measurements, psychophysics. This course will prepare speech-language pathology candidates as dedicated practitioners, reflective scholars,
and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Undergraduates: 2.8 GPA; Graduates, admitted to Graduate College. Crosslisted as: SPED 4390.

## SPED 8400 - Learning Disabilities (3)

The purpose of this course is to introduce students to the field of learning disabilities. The course covers the laws that affect students with learning disabilities (No Child Left Behind Act, and the Individuals with Disabilities Education Improvement Act of 2004), characteristics of learning disabilities, definitions, history, assessment, medical aspects, teaching of preschoolers and adolescents, and teaching strategies for pre-academic learning, oral language, reading, writing, mathematics, and socialemotional development. This course will prepare special education candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Graduate standing.

## SPED 8410 - Motor Speech Disorders (3)

This course is designed to integrate background information from neurophysiology related to motor speech disorders (MSDs). The term motor speech disorders refers to speech deficits and differences resulting from injury to the human nervous system. This course will focus on acquired and developmental movement-based disorders of speech production that impact one or more of the following subsystems of speech: respiration, phonation, resonation, and/or articulation, including the dysarthrias and apraxia of speech. This course will entail clinical description and characteristics of the impairments as well as the psychosocial changes in life activities and participation of individuals who live with MSDs.

Prerequisite: SPED 8470 or equivalent, not open to nondegree students.

## SPED 8420 - Voice Disorders (3)

The purpose of this course is to provide candidates the opportunity to study the disorders of voice in depth so that they are able to effectively orchestrate caseloads including this disorder type. Voice disorders of both organic and functional etiology will be studied. Candidates will have opportunities to conduct indirect laryngeal examinations using traditional indirect equipment as well as rigid endoscopic equipment. The disorders will be discussed to cover the range of topics including etiology, symptomology, assessment and diagnosis, prognosis, and treatment, both medical and non-medical. Phonatory and resonatory aspects will be included.

Prerequisite: Graduate standing.

## SPED 8430 - Fluency Disorders (3)

This course examines the types and causes of rate, rhythm, and stress pattern differences as they relate to child, adolescent, and adult fluency disorders. Theory, current research, and contemporary practice constitute the foundation within which to address issues of identification, general assessment, differential assessment, prescription, and the implementation and evaluation of treatment strategies. This course is one of many that prepares speech-language pathology candidates to become dedicated practitioners, reflective scholars, and responsible citizens.

Prerequisite: Graduate.

## SPED 8440 - Aphasia \& Related Language Disorders

 (3)This course is designed to integrate background information from neurophysiology to aphasia and related disorders such as right hemisphere syndrome, traumatic brain injury (TBI), and dementia. The term aphasia refers to linguistic deficits resulting from injury to the human nervous system. This course will focus on acquired cognitive and linguistic-based disorders of the human communication system and will entail clinical description and characteristics of the impairments as well as on the psychosocial changes in life activities and participation of individuals who live with aphasia and/or related disorders.
Prerequisite: SPED 8470 or equivalent; not open to nondegree students.

## SPED 8460 - Diagnostic Practicum in Communication Disorders (1)

This practicum is designed to provide candidates with the opportunity to apply their knowledge of the principles and practices of assessment, awareness of a variety of formal and informal measures, and the analysis and interpretation of assessment data. The course prepares candidates to become dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: Three semesters of SPED 8500, unless otherwise indicated, and permission; co-requisite with SPED 8510 or SPED 8520.

## SPED 8470 - Neurophysiology of Speech and Language

 (3)The purpose of this course is to provide speech-language pathology graduate candidates an introduction to human neuroanatomy and neurophysiology of the speech, language and hearing mechanisms, across the lifespan. Emphasis is placed on developing an understanding of the neurophysiological underpinnings of human communication and its disorders. Ultimately, the course will prepare speech-language pathology graduate candidates as dedicated practitioners, reflective scholars,
and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Graduate Standing Speech-Language Pathology Majors Only.

## SPED 8500 - Basic Clinical Practicum in SpeechLanguage Pathology (1)

These courses are designed to provide the speech-language pathology candidate with experiences of a clinical nature prior to intensive participation in practica in the educational, medical, clinical, and/or other rehabilitation settings. The courses prepare candidates to become dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: SPED 4510 or 4520, Speech/language pathology major, 3.0 GPA overall. Permission from program faculty.

## SPED 8510 - Educational Externship in Communication Disorders (3)

This course is designed to provide the speech-language pathology candidate with experiences of a clinical nature in educational settings. The purpose of the course is to advance the candidate's skills in the evaluation and management of communication and swallowing disorders. This is one of two capstone experiences for the candidates to become dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Three semesters of SPED 8500 unless otherwise indicated plus permission; co-requisite SPED 8460.

## SPED 8520 - Medical Externship in Communication Disorders (3)

This course is designed to provide the speech-language candidate with experiences of a clinical nature in medical settings. The purpose is to advance the candidates' skills in the evaluation and management of communication and swallowing disorders. This is one of two capstone experiences for the candidates to become dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: Three semesters of SPED 8500 unless otherwise indicated plus permission; co-requisite SPED 8460.

## SPED 8530 - Seminar in Speech-Language Pathology

 (3)This course is designed to provide intensive discussion of research or problems of current professional interest based on current literature in speech-language pathology. This course will prepare candidates as dedicated practitioners,
reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Graduate standing.

## SPED 8540 - Autism Spectrum Disorders (2)

This course is designed to familiarize candidates with the features of and interventions for individuals with autism spectrum disorders. The course will emphasize current research into various methodologies for social and communication skills. This course will prepare speech language pathology candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: Co-requisite: SPED 8560. Admission to the graduate college.

## SPED 8556 - Special Needs Students from Diverse Communities (3)

The purpose of this course is to study the impact of cultural and linguistic diversity on communication, learning, and behavior. The contrast between what is considered 'normal' language / learning development and in the presence of culturally and linguistically diverse (CLD) P12 students will receive special emphasis. This course prepares candidates to be dedicated practitioners, reflective scholars, and responsible citizens for the 21st century.

Prerequisite: None. Crosslisted as: SPED 4550.

## SPED 8560 - Augmentative \& Alternative

 Communication (2)This course is designed to introduce the candidate to the nature and process of augmentative and alternative communication (AAC), current theories and models of AAC, basic elements of AAC systems, and contemporary AAC clinical practices and principles. Topics will be examined from educational and rehabilitational perspectives as they relate to assessment, prescription, implementation and evaluation. The course will emphasize practical solutions in AAC for children and adults using both high technology and other less-complex communication strategies. This content is intended to prepare candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Graduate standing in Speech-Language Pathology program; co-requisite: SPED 8540.

## SPED 8570 - Dysphagia (3)

This course is designed to integrate background information from neurophysiology to dysphagia. The term dysphagia refers to swallowing disorders resulting from congenital birth anomalies (i.e., cleft palate, cerebral palsy, etc.) as well as acquired injury to the central nervous system (i.e., stroke, head injury, etc.). This course will introduce candidates to bedside, radiographic, and
endoscopic assessment procedures as well as direct, indirect, and medical management techniques of dysphagia. Additionally, this course will provide clinical description and characteristics of swallowing impairments as well as on the psychosocial changes in life activities and participation of individuals who live with dysphagia. This course will prepare candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: SPED 8470 or equivalent.

## SPED 8590 - Language Disorders: Birth to Five (3)

This course is designed to provide candidates with knowledge about communicative disorders in young children within a multicultural and global framework. It will cover assumptions underlying current approaches to the evaluation and treatment of language disorders in the developing child. Major emphasis will be upon the theoretical foundations of the study and treatment of communication disorders in children from birth to age five.

Prerequisite: SPED 4420 or equivalent.

## SPED 8606 - Mental Retardation (3)

This course introduces candidates to concepts related to mental retardation/developmental disabilities such as definitions, identification, etiology, and assessment of persons with mental retardation as well as current models and research in the areas of residential, vocational, educational, and recreation/leisure programming in least restrictive settings. This course will prepare undergraduate and graduate candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Undergraduates: Candidates must have completed EDUC 2510. Graduates: Graduate standing. Crosslisted as: SPED 4600.

## SPED 8700 - Seminar in Special Education (3)

The seminar in Special Education is designed to be one of the very last courses taken by a master's degree candidate. Content covers a wide range of topics such as: 1) continuum of care; 2) educational and community service systems; 3) legislation; 4) family concerns; and 5) comparative special education. Each candidate develops a teaching module on one of the course topics, which is discussed and evaluated in class.

Prerequisite: Graduate standing.

## SPED 8720 - Basic Student Teaching (3)

This course provides candidates with a semester of classroom experience teaching students with disabilities. This experience is for graduate candidates who are completing their work toward state endorsement in teaching the various areas of special education. This course will prepare graduate candidates as dedicated practitioners,
reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Admission to the graduate program in the desired endorsement, completion of 30 hours of required course work, and permission.

## SPED 8730 - Advanced Student Teaching (3)

This course provides candidates with a second semester of classroom experience teaching students with disabilities. This experience is for graduate candidates who are extending their initial endorsement to complete a PK-12 endorsement. This course will prepare graduate candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world..

Prerequisite: Admission to the graduate program in the desired endorsement and completion of SPED 8720 or SPED 8930 or equivalent., and permmission by department.

## SPED 8806 - Social and Emotional Development of Children and Youth (3)

This course is designed to prepare teacher candidates and graduate candidates with the understanding of the psychological, biological and environmental factors that affect the social-emotional development of children and adolescents. Emphasis is placed on the interaction of these factors for children with exceptional learning needs and the implications for the learning environment.

Prerequisite: Graduate standing. Crosslisted as: SPED 4800.

## SPED 8810 - Research Methods in Special Education (3)

This course is designed to provide an examination of the theoretical approaches to conducting educational research, research design and analysis, and interpretation and evaluation of existing research in special education and related fields. All of these topics are intended to prepare candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: SPED 8120 High Incidence Disabilities or permission from the instructor.

## SPED 8816 - Classroom Management (3)

This course introduces a variety of practical techniques that teachers may use in the management of classroom behavior. Models of classroom management are presented that vary in the amount of control used by the teacher. This course will prepare special education candidates to be dedicated professionals, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Undergraduate Candidates: 2.5 GPA, EDUC 2510 Graduate Candidates: None. Crosslisted as: SPED 4810.

## SPED 8820 - Behavioral Disorders (3)

This course is designed to assess and examine the causes and characteristics of behavioral disorders, which constitute internalizing, externalizing, and pervasive developmental disorders. Extensive use of the case study method will be used. This course will prepare special education candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: Graduate standing.

## SPED 8830 - Practicum In Behavioral Disorders (3)

This course provides candidates with either inservice experience or placement in a school program for students with Behavioral Disorders at an academic level commensurate with the candidate's desired level of endorsement (PK-9, or 7-12). This course will prepare graduate candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Admission to the graduate program in special education with an emphasis in behavior disorders, completion of 30 hours of the required coursework, and permission by the department.

## SPED 8840 - Advanced Practicum In Behavioral Disorders (3)

This course provides candidates with either inservice experience or placement in a school program for students with Behavioral Disorders at an academic level (PK-9, or $7-12$ ) that is different from their SPED 8830 practicum setting. This course will prepare graduate candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: SPED 8830 and permission.

## SPED 8850 - Methods and Materials in Behavioral Disorders (3)

The focus of the course will be on interventions which have been effective with students with behavior disorders which include life space intervention, social skills training, anger management, and cognitive behavior modification in multi-cultural settings. This course will prepare special education candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.
Prerequisite: Graduate standing and successful completion of SPED 8820.

## SPED 8860 - Behavior Modification (3)

This course is designed to equip candidates with the skills necessary to assess, modify, and evaluate behavior in accordance with best practice and research-based approaches. In addition, this course will train candidates on how to conduct a functional behavioral assessment and create behavioral intervention plans in accordance with IDEA. This course will prepare graduate candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Graduate standing.

## SPED 8900 - Administration \& Supervision of Special Education (3)

The purpose of this course is to provide the candidate with the basic information required to administer and supervise an educational program for students with disabilities, to supervise and evaluate personnel, to interpret special education legislation, and case law related to providing services to children and youth with disabilities. This course will prepare special education candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Graduate standing.

## SPED 8910 - Assessment in Special Education (3)

This course provides an overview of measurement and evaluation concepts, strategies, and techniques that are appropriate for students with special needs. Graduate candidates will implement and analyze formal and informal assessments using a systematic and comprehensive approach. Emphasis is placed on those assessment strategies that yield objective data regarding individual learning characteristics that provide a basis for educational decision-making. The course will prepare special education graduate candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Graduate standing.

## SPED 8930 - School Practicum in Resource Teaching/Learning Disabilities (3)

This course provides candidates with either inservice experience or placement in a school program for students with learning disabilities at an academic level commensurate with the candidatel's desired level of endorsement (PK-9, or 7-12). This course will prepare graduate candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Admission to the graduate program in learning disabilities, completion of 30 hours of the required coursework, and permission by the department.

## SPED 8960 - Advanced Diagnosis of Learning Deficits (3)

The purpose of this course is to provide the candidate with in-depth practicum experiences in the administration and interpretation of norm-referenced achievement measures (non-psychological), criterion-referenced tests, and informal assessment diagnostic teaching probes to children experiencing a wide range of learning and behavioral problems affecting school performance within a multicultural and global society. Emphasis is placed on the development of reports that lead readily to the development of presccriptions, which facillitate the orchestration of learning. This course prepares special education candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their profession in a changing world.

Prerequisite: Admission to the Master of Science degree program in Learning Disabilities and permission of the instructor. Candidates enrolling in this course must also have successfully completed SPED 8910, SPED 8646, and SPED 8970.

## SPED 8970 - Instructional Strategies (3)

This course is designed to prepare graduate candidates with in-depth information regarding effective teaching strategies for students with learning disabilities. Primary emphasis is placed on providing students with theoretical and practical foundations in the design and implementation of cognitive strategy instruction and the use of evidencebased practices and the selection and monitoring of individualized interventions.
Prerequisite: Admission to the Master of Science degree in special education with a concentration in mild to moderate disabilities (or any graduate program in the department which requires, or recommends, this course) or permission of the instructor.

## SPED 8980 - Professional Collaboration (3)

This course is designed to prepare candidates to work in collaboration with other professionals and parents to create a learning environment that enhances the potential for academic success and improvement of instructional practices. The focus will be on collaborative problem solving.

Prerequisite: Admission to Graduate College. Crosslisted as: TED 8850.

## SPED 8990 - Thesis (1-6)

This course is intended for all graduate candidates in the Department of Special Education and Communication Disorders who are seeking a Master of Arts degree. The
candidate is expected to generate and complete an independent research project under the guidance of a thesis advisor.

Prerequisite: Graduate status, permission of thesis committee chair, and TED 8010 (Introduction to Research).

## STAT - Statistics

## STAT 8015 - Statistical Methods II (3)

Regression and correlation, analysis of covariance, chisquare type statistics, more analysis of variance, questions of normality, introduction to non-parametric statistics. Statistical packages are used when appropriate.

Prerequisite: STAT 3000/8005 or equivalent. Crosslisted as: STAT 3010.

## STAT 8805 - Applied Engineering Probability and Statistics (3)

An introduction to the application of probability and statistics to engineering problems. Topics include: probability and probability distributions, mathematical expectation, distribution of random variables, binomial, Poisson, hypergeometric, gamma, normal, and tdistributions, Central Limit Theorem, confidence intervals, hypothesis testing, linear regression, contingency tables. Credit for both MATH 4740 and STAT 3800 will not be given.

Prerequisite: MATH 1970. Crosslisted as: STAT 3800.

## TED - Teacher Education

## TED 8000 - Special Studies (1-3)

A series of intensive studies especially for in-service teachers scheduled as regular seminars or classes, according to purpose.

## TED 8006 - Special Methods in the Content Area (3)

This course is designed to develop knowledge, skills, and dispositions requisite of secondary teachers. Course content is determined by the discipline area and for some content areas a field experience will be required.

Crosslisted as: TED 4000.

## TED 8010 - Introduction to Research (3)

This course will introduce advanced degree candidates to (1) an understanding of the scientific method as applied to behavioral research, (2) assessment, evaluation, descriptive, causal-comparative, experimental and historical data gathering procedures and analytical strategies, (3) sampling theory, techniques, distribution and hypothesis testing, (4) specific designs, methods, and tools of research, (5) search and retrieval of published research, both American and international (global), in the library and
over the Internet, (6) critical evaluation of research studies, (7) basic statistics, both descriptive and inferential, and (8) preparation of a research proposal containing three chapters: Problem, Review of Related Research (from an international global perspective with particular sensitivity toward multicultural issues), and Methodology.

Prerequisite: Graduate standing.

## TED 8020 - History and Philosophy of Education (3)

This course is designed to provide a critical perspective, both historical and philosophical, for understanding education in the United States. The course examines critically the evolution of educational thought and practice from the Colonial era to the present U.S.

Prerequisite: Graduate standing.

## TED 8030 - Seminar in Education: Special Topics (13)

This is a variable content course focusing on topics of current relevance to PK-12 teachers.

## TED 8040 - Seminar on Student Teaching/New Teacher Induction (3)

The seminar is designed for experienced teachers who are, or may be, serving as cooperating teachers for student teachers or as mentor teachers for beginning teachers.
Participants will study the purposes, techniques, and trends involved in serving as a cooperating teacher or as a mentor.
Prerequisite: Successful teaching experience is required for this course.

## TED 8060 - Current Issues and Trends in Education (3)

The course is an advanced study of current issues and trends which have substantial impact on P-12 education in the U.S.A. The graduate candidates who take this class will read important material related to the issues and apply analysis, synthesis, and evaluative techniques to it so that they are conversant with the issues and some of the relevant research from knowledgeable scholars.

Prerequisite: Graduate status.

## TED 8070 - Teaching Multiple Intelligence (3)

This course focuses on the utilization of the multiple intelligences (MI) theory by teachers to enhance children's understanding of various disciplines. Graduate candidates will have the opportunity to explore, evaluate, and develop various methodologies that foster understanding.
Prerequisite: Graduate status.

## TED 8080 - Storytelling and Education (3)

This course is designed to consider the importance of storytelling, to provide teacher candidates with the background materials for storytelling, to study resource material for storytelling from a variety of cultures, and to
develop techniques for storytelling. Actual experience in storytelling and opportunities for evaluating storytelling experiences will be provided.

## TED 8090 - Economic Education (3)

A study and examination of economic principles, teaching strategies, and curriculum materials and how they can be related to the teacher's classroom presentation. This course is designed to furnish the teachers with sufficient background and understanding to aid in the recognition of economic issues and the teaching of economic concepts and principles to help the teacher be a more effective teacher of economics K-12.

Prerequisite: Open to any graduate candidates with no previous college work in economics who are teaching K12. Not open to majors in economics.

## TED 8100 - Research Project (1-3)

This course is designed for individual or group study and analysis of specific problems in schools dealing with curriculum and instruction in areas which have a broad scope of application rather than a specific level.

Prerequisite: Approval of advisor.

## TED 8110 - Introduction to Multicultural Education (1)

This course is designed for certificated teachers seeking renewal of Nebraska certification under Nebraska LB 250. The purpose of the course is to develop awareness of cultural diversity in American society and to develop skills to effectively meet the needs of students, parents, and school community members.
Prerequisite: Graduate status.

## TED 8130 - Language, Culture, and Power (3)

This course will focus on the intersection of language, culture, and power in the schools. This seminar will research how each component impacts the students and teachers in the classroom.

Prerequisite: None.

## TED 8180-Culturally Responsive Teaching (3)

This course includes an introductory analysis of the societal and institutional processes and problems which have bearing upon the education of children in urban settings. In addition, the course will focus on knowledge, skills and dispositions related to instructional strategies and classroom management needed for effective teaching in an urban environment.

Prerequisite: Graduate status.

## TED 8190 - Contemporary Issues in Urban Education

 (3)This course is designed for candidates who wish to keep abreast of contemporary issues which confront the
educational institution and teaching profession within the urban milieu.

Prerequisite: Graduate Status.

## TED 8210 - Human Relations for Bias Free Education (3)

This course will develop practicing teachers` awareness of and skill in meeting the needs of P-12 students with regards to the areas of human understanding, acceptance and value. Candidates will examine existing attitudes towards various minority groups such as racial, ethnic, gender, exceptionality, etc. School materials and attitudes will also be examined in determining the effect they have on P-12 students.

Prerequisite: Graduate status.

## TED 8220 - Play as a Learning Medium in Early Childhood Education (3)

This course provides an in-depth examination of young children's play and its curricular role in the early childhood classroom. The origins, developmental outcomes, assessment, curricular implementation, and evaluation of play will be covered, with an emphasis on play as a major component of developmentally appropriate practice with young children. The focus is on teachers learning to help children become partners in the operation of the learning environment.

## TED 8246 - Parent Involvement in Early Childhood Education (3)

This is a course for classroom teachers and teachers-intraining to learn to work effectively with parents. The course will examine the purposes and methods of several approaches to parent-teacher relations and help candidates become familiar with and develop the skills necessary for the planning, design, implementation and evaluation of effective parent involvement components in early childhood settings.

Crosslisted as: TED 4240.

## TED 8250 - Assessment for the Classroom Teacher (3)

This course studies assessment principles, effective practices, and classroom assessment processes throughout the curriculum. The research regarding assessment for learning is studied and application is made to classroom practices.
Prerequisite: Graduate status.

## TED 8260 - Curriculum Design \& Implementation in Early Childhood Ed. (3)

This course is designed to provide an in-depth examination of the processes used in selecting and implementing appropriate curricular content in programs for children ages three to eight years. Particular emphasis is on the role
of the teacher as a dedicated practitioner and reflective scholar in the early learning environment.

## TED 8276 - Current Trends in Early Childhood Education (3)

This course provides a context for examining the impacts of the issues and trends of the programs for young children and their families at the local, national and international level. In this course, the graduate candidate is expected to conduct a service-learning action research project with children.

Crosslisted as: TED 4270.

## TED 8286 - Patterns of Care in Early Childhood Education (3)

Exploration of contemporary patterns of home and school care of the young child from birth to six years.

Crosslisted as: TED 4280.
TED 8296 - Learning Materials for Early Childhood Education (3)
This course is designed to promote the development of sound criteria for use in selecting appropriate learning materials for children from three to eight years of age.

Prerequisite: TED 4260 or 8260 . Crosslisted as: TED 4290.

## TED 8300 - Effective Teaching Practices (3)

This course focuses on specific characteristics and behaviors of effective teachers. Course content will be derived from research on teaching and learning.

Prerequisite: Graduate status.

## TED 8330 - Analysis of Teacher Behavior (3)

This course is designed for educators who want to study, implement, reflect upon and share best practice. Candidates will examine the role and responsibilities of teachers as educational leaders and assume a role in advancing the scholarship of teaching.

## TED 8376 - Introduction to the Middle School (3)

This course is designed to introduce candidates to the unique characteristics of the middle student, school, curriculum, history, and philosophy.
Prerequisite: EDUC 2010. Crosslisted as: TED 4370 and TED 4370.

## TED 8396 - Teaching at the Middle School (3)

This course will provide candidates with a variety of middle level teaching techniques and strategies in their classrooms that have been identified in current research literature as appropriate for the middle level.

Prerequisite: Junior standing, TED 4370, EDUC 2510, EDUC 2520, EDUC 2524. Crosslisted as: TED 4390 and TED 4390.

## TED 8410 - Improvement of Instruction: Special Topics

 (3)This course provides an in-depth study of instructional theory, research, and methodology designed to extend teachers' professional knowledge base and enhance their pedagogical skills. When offered, a course may be limited to improvement of instruction in a selected subject area.

## TED 8420 - Trends and Teaching Strategies in Science Education (3)

This course is designed for the graduate candidate in the Department of Teacher Education whose study program emphasis is in the area of science education. The course will describe and analyze past and present trends in science education, including curricula, teaching-learning strategies, the laboratory and instructional materials. The course focus will be K-12 and as such is meant to serve both elementary and secondary graduate candidates.

Prerequisite: Graduate status.

## TED 8430 - School Curriculum Planning (3)

This course is designed to provide advanced degree candidates with an understanding of the theory, principles, and practices utilized in curriculum planning in American schools. This course focuses on the principles and practices of effective curriculum planning and teachers' part in these processes as curriculum developers.

## TED 8470 - Teaching the Language Arts (3)

This course is designed to enhance candidates' knowledge of best practices in teaching reading, writing, listening, and speaking. Candidates will learn about research supported appropriate language arts instruction strategies and assessments. This course will inform graduate students as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their professions in a changing world.

## TED 8510 - Aerospace Education Workshop (3)

This course will focus on aviation and space education and its impact on society. It will seek to communicate knowledge, impart skill, and develop attitudes relative to the scientific, engineering and technical as well as the social, economic and political aspects of aviation and space flight efforts.

Prerequisite: Graduate. Crosslisted as: AVN 8510.

## TED 8520 - Capstone Practicum - School Library Media (3)

Candidates will gain direct experience and an understanding of the theories, concepts and activities integral to public services, technical services, and the
administration in a 21 st Century library and information agency at an assigned field site. Candidates will demonstrate the ability to plan, develop, and implement programming and services for patrons and diverse learners in their schools and communities.

Prerequisite: There are no course prerequisites for the Capstone Practicum but candidates must be in the final two semesters of their library media program.

## TED 8540 - Intro to Technology Tools for Learning (3)

This course is designed to help educators become comfortable and competent with infusing a wide variety of computer-mediated educational technologies into the learning environments of the students with whom they work, as well as become familiar with philosophical, psychological and sociological notions of the impacts of computer applications upon social institutions, such as schools.

## TED 8550 - Digital Multi-media in Learning (3)

This course provides participants with an introduction to the use of multimedia for teaching and learning. Participants will research and share the current knowledge base on the issues and effectiveness of various media learning programs, gain experience with multimedia applications, create multimedia learning materials, evaluate existing multimedia learning opportunities and articulate personal principles concerning multimedia instruction and learning.

Prerequisite: TED 8540 or intermediate computer experience.

## TED 8560 - Supporting Instructional Technology Environments (3)

This course is designed for educators who wish to become better advocates of technology integration in the classroom and/or to become a Technology Coordinator or Educational Technician in all curricular areas and all grade levels. Course candidates will learn to use problemsolving skills to evaluate and implement strategies to keep technology up to date, effectively use technology in the classroom, and properly manage technology in a school setting.

Prerequisite: TED 8540 or equivalent.

## TED 8570 - Internet in the Learning Process (3)

This course is designed to help educators actively explore instructional implementations of Internet use appropriate for use in K-12 classrooms, successful diffusion of Internet innovations in educational environments, and emerging multicultural "breaking down the walls of the classroom" concepts available to educators through Internet use.

Prerequisite: Prior word processing experience is strongly recommended.

## TED 8580 - Collaboration Tools in the Learning Process (3)

This course is designed to help educators design, author, and utilize collaborative web-based instructional materials that will implement active learning and will be appropriate for use in K-12 classrooms.

Prerequisite: TED 8570 or equivalent.

## TED 8596 - Teaching and Learning in Digital Environments (3)

This course introduces technology and technical literacies required of educators and information specialists in 21st Century libraries and classrooms. Course topics include information literacy, instructional design in digital environments, Web page design and construction, social networking and learning, and academic integrity.

Crosslisted as: TED 4590.

## TED 8600 - Advanced Seminar in Educational Technology (1-3)

This is a variable content course focusing on selected advanced topics in educational technology. Course topics will include such subjects as optical technologies, robotics, distance education, and virtual realities. The course may be taken more than once for credit, provided that the topics differ, with a maximum of 6 credit hours.

## TED 8616 - Teaching of Writing Throughout the Curriculum (3)

This course is designed to enhance candidates' knowledge of best practices in teaching writing. Candidates will learn about research supported appropriate writing instruction strategies and assessments. Candidates will be writing extensively throughout the course as they examine the varied ways writing extends throughout the curriculum. This course will inform candidates as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their professions in a changing world.

Prerequisite: For 4610: EDUC 2510, EDUC 2520.
Crosslisted as: TED 4610.

## TED 8620 - Advanced Support of Instructional Technology Environments (3)

This course is designed for $\mathrm{P}-12$ educators who wish to become better advocates of technology integration or become technology coordinators or school technicians. Course enrollees will evaluate and implement advanced strategies to keep technology up to date, effectively use technology, and properly manage technology in a school setting.

Prerequisite: TED 8560.

## TED 8650 - Children's Literature and Education (3)

Explores story, poetry, drama, and informational materials for elementary and middle school levels with an emphasis on methods for including literature in school curricula and children's lives. Examines current issues, recent materials, and the theoretical and research base of this field to develop meaningful and creative learning, literacy, and library experiences for children.

## TED 8660 - Young Adult Literature and Education (3)

This course extends candidates' knowledge of literature and literary resources for students in middle and high school and includes discussions of issues and trends in popular culture that impact reading and viewing habits of young adults. The course also examines the theoretical and research base of this field to develop meaningfully and creative learning, literacy, and library experiences.

Prerequisite: Graduate status.

## TED 8690 - Special Topics in Economic Education (13)

This course focuses on instructional innovations in K-12 economics education, i.e. economic issues, new teaching strategies, and innovative curriculum materials. In addition to learning about these issues, strategies, and materials, candidates develop plans for introducing them into their classrooms and assessing the impact of these instructional innovations. Not open to economics majors. (Cross-listed with ECON 8690)

Prerequisite: Permission of the course instructor.

## TED 8700 - Elementary Education Capstone Course (3)

This course is designed as a required, final capstone course for Elementary Education graduate students to be taken in the last nine hours of the Master of Science program. A grade of B or better must be received in TED 8700 to show satisfactory completion of the course and for program completion.

Prerequisite: TED 8010 and permission of the Elementary Education Program Chair.

## TED 8710 - Reference Resources and Services (3)

Candidates will demonstrate an understanding of the theories, concepts and activities integral to reference resources and services in 21st Century libraries and information agencies. Candidates will demonstrate an understanding of effective search strategies and efficient use of both print and digital resources, design and promote information literacy instruction that is developmentally appropriate, and understand the legal and ethical responsibilities integral to positive and proactive reference services for patrons and diverse learners.

TED 8726 - Special Libraries and Information Agencies (3)

Candidates will demonstrate an understanding of the major types of 21st Century special libraries and information agencies. Candidates will demonstrate an understanding of social and political environments, clientele, services, collections, physical settings, financing and staffing, and future trends in the special libraries and information agencies.
Crosslisted as: TED 4720.

## TED 8746 - Cataloging and Classification (3)

Candidates will demonstrate a basic understanding of the theories, concepts and activities of descriptive and subject cataloging and classification procedures of books in 21st Century libraries and information agencies using the Anglo-American Cataloguing Rules, 2nd edition, the Library of Congress and Dewey Decimal classification schemes, Sears and Library of Congress subject headings.

Crosslisted as: TED 4740.

## TED 8756 - Advanced Cataloging and Classification (3)

Candidates will demonstrate an understanding of the theories, concepts and activities of descriptive and subject cataloging of non-book materials (including serials and digital resources) in 21st Century libraries and information agencies using the Library of Congress and Dewey Decimal classification schemes and Library of Congress subject headings.

Prerequisite: TED 8746. Crosslisted as: TED 4750.

## TED 8760 - Managing Collections in Libraries and Information Agencies (3)

Candidates will demonstrate an understanding of the theories, concepts and activities integral to proactive collection management in 21st Century libraries and information agencies. Candidates will demonstrate an understanding of community analysis, collection analysis, and the ability to conduct critical evaluations of a diverse array of information resources.
Prerequisite: NONE.

## TED 8770 - Integrating Technology into Instructional Design (3)

The purpose of this course is to introduce participants to effective methods for the integration of educational media into instructional design, thereby further developing themselves as dedicated practitioners, reflective scholars and community leaders. The course provides participants (1) knowledge of broad instructional design theories and models with a concentration on constructivism, (2) experience in designing instruction that effectively integrates technology into the teaching-learning process, and (3) experience in producing instructional media. The
course is intended to provide fundamentals in the selection, evaluation, production, application and utilization of educational media. This course is designed for in-service library media or instructional technology specialists as well as regular classroom teachers. It is also useful for others interested in learning about the various types and applications of educational media.

Prerequisite: Graduate status.

## TED 8800 - Multicultural Literature for Children and Youth (3)

This is designed as a graduate-level course dealing with utilization of literary materials representing authors and content from multiple perspectives, particularly authors whose cultural and ethnic backgrounds differ from the mainstream.

## TED 8806 - Leadership and Management in Libraries and Information Agencies (3)

Candidates will demonstrate an understanding of the theories, concepts and activities integral to leading and managing 21st Century libraries and information agencies. Candidates will demonstrate an understanding of leadership principles and management strategies that engage policies and procedures that support the personal, academic and professional needs for patrons and diverse learners.

Crosslisted as: TED 4800.

## TED 8816 - Principles and Philosophy of Integrating Career and Academic Education (3)

This course presents the philosophies and principles/practices underlying how schools can better prepare students for the workplaces of the future with emphasis on the integration of career education within broader academic preparation. The roles and responsibilities of teachers, counselors, and administrators in implementing integrated approaches will be examined.

Crosslisted as: TED 4810.

## TED 8850 - Professional Collaboration (3)

This course is designed to prepare candidates to work in collaboration with other professionals and parents to create a learning environment that enhances the potential for academic success and improvement of instructional practices. The focus will be on collaborative problem solving.
Prerequisite: Admission to graduate college. Crosslisted as: SPED 8980.

## TED 8856 - Coordination Techniques in Vocational Education (3)

This course reviews responsibilities and techniques of coordination for the vocational teacher-coordinator and/or vocational coordinator, with special emphasis on
administration of the part-time cooperative program and analysis of the laws and regulations governing this program.

Crosslisted as: TED 4850.

## TED 8970 - Independent Study (1-3)

This is a specially designed course taken under the supervision of a graduate faculty member to accommodate the student who has identified a focus of study not currently available in the departmental offerings and who has demonstrated capability for working independently.

Prerequisite: Permission of department and graduate faculty member.

## TED 8980 - Practicum: Various Content Areas (1-6)

This course is designed to provide school professionals with a guided, supervised, field experience that will develop and enhance the knowledge, skills, and dispositions requisite of a successful educational practitioner.

Prerequisite: Prerequisites for the course will vary, depending on the content/discipline area. See syllabus for specific discipline area.

## TED 8990 - Thesis (1-6)

This course is an independent research project completed under the direction of a thesis advisor and required of all candidates pursuing a Master of Arts degree or a Master of Science with Thesis option.

Prerequisite: Completion of Selective Retention and approval of advisor.

## TED 8050 - New Ways of Knowing \& Education (3)

TED 8140 - Spanish Language Arts (3)
TED 8486 - Adult Group Leadership (3)
TED 8590 - (3)
TED 8750 - Seminar in Literature for Children and Young Adults (3)

## TED 9100 - Theories and Processes of Reading (3)

This course develops a framework about the theories, processes, and related research associated with literacy. The content looks across grade levels and student populations, and across social and cultural contexts in an examination of factors that impact theories and processes of literacy.

Prerequisite: Graduate status.

## TED 9110 - Principles and Practices for Teaching Reading (3)

This graduate course for both elementary and secondary teachers is open to any candidate who has graduate
standing in education. The purpose of the course is to develop a broad understanding of the reading process as well as materials and instructional strategies that support students who are emerging, developing, and maturing as readers in all areas of the curriculum.

## TED 9130 - Applications of Literacy Evaluation and Instruction (3)

(formerly TED 9190) This course is designed for graduate candidates enrolled in the Reading Masters or endorsement program. The purpose of this course is to develop an understanding of theory and research as it relates to assessment and evaluation of reading difficulties. Application of this knowledge is applied through a practicum experience with elementary students in which candidates integrate issues and practices related to assessment and evaluation of reading disabilities.
Prerequisite: TED 9100 and TED 9110.

## TED 9140 - Assessment and Instruction for Secondary Readers (3)

(formerly TED 9120) The purpose of this course is to develop an understanding of theory and research as it relates to assessment and evaluation of reading difficulties among middle and high school students. Included in this course is knowledge about the role and responsibility of the reading specialist as it relates to coaching, mentoring, supervision, and evaluation of a reading program. Application of this information is demonstrated through a practicum experience with middle and high school students.

Prerequisite: TED 9100, TED 9110, TED 9130.

## TED 9180 - Seminar in Research in Reading (3)

This course reviews and critically examines current research studies in literacy from the perspectives of knowledge about literacy processes, classroom practice, and research design. Teacher candidates apply these issues in an action research project they design and implement.

Prerequisite: TED 9100, TED 8010.

## TED 9200 - Critical Pedagogy: Teaching for Social

 Justice (3)This course examines ways in which ideology, power, and culture intersect in $\mathrm{P}-12$ educational settings. Undemocratic, inequitable, and oppressive structures are identified. Possibilities for democratic, equitable transformations are proposed.

Prerequisite: Graduate status.

## TED 9190-Applications of Literacy Instruction \&

 Evaluation (3)
## THEA - Theatre

## THEA 8000 - Special Topics in Theatre and Drama (3)

A variable content course dealing with theatre and drama. Each offering will treat a single aspect of theatre or drama in depth - e.g., Shakespeare in performance, the history of acting theory, the history of theatrical design, etc.
Prerequisite: Graduate or permission of instructor.
THEA 8016 - Advanced Projects in Theatre (1-3)
Special projects in theatre supplementing regular courses; individual research projects; combined study and practicum.

Prerequisite: 9 hours of theatre in the general area to be studied and permission of the instructor. Crosslisted as: THEA 4010.

THEA 8026 - Advanced Projects in Theatre (1-3)
Special projects in theatre supplementing regular courses; individual research projects; combined study and practicum.
Prerequisite: 9 hours of theatre in the general area to be studied and permission of the instructor. Crosslisted as: THEA 4020.

## THEA 8030-Internship in Theatre (1-6)

Maximum of six hours to be granted upon completion of written report on internship. The internship will be in some area of theatre. Students will receive a letter grade for the course. May be taken for a maximum of six hours of credit.
Prerequisite: Permission of the theatre graduate program committee chair.

## THEA 8040 - Internship in Theatre (1-6)

Maximum of six hours to be granted upon completion of written report on internship. The internship will be in some area of theatre. Students will receive a letter grade for the course. May be taken for a maximum of six hours of credit.
Prerequisite: Permission of the theatre graduate program committee chair.

## THEA 8076 - Youth Theatre Production (3)

Methods in organizing, developing and presenting theatre production that involve young people as performers. Intended for teachers, youth group sponsors or anyone who is interested in presenting plays acted by young people. Scripts for production will employ materials from around the world which represent a diverse ethnic and cultural background.

Prerequisite: Graduate Standing. Crosslisted as: THEA 4070.

## THEA 8316 - Advanced Acting: Postrealism (3)

Advanced work in the technical skills of voice, speech, movement and textual analysis needed for post-realist material.

Prerequisite: graduate with an undergraduate major or minor in theatre or permission of instructor. Crosslisted as: THEA 4310.

THEA 8326 - Advanced Acting: Greeks to Restoration (3)

The fundamental theories and practices of major styles of acting from ancient Greece to the Restoration, including interpretation of outstanding dramatic literature.

Prerequisite: Graduate with an undergraduate major or minor in theatre or permission of instructor. Crosslisted as: THEA 4320.

## THEA 8336 - Advanced Acting: Ensemble Play Production (3)

In-depth exploration of a play or playwright's work to connect acting class with performance. Special emphasis on creating a working process that allows the ensemble to emerge. The class will culminate in public performance.

Prerequisite: Graduate with an undergraduate major or minor in theatre or permission of instructor. Crosslisted as: THEA 4330.

## THEA 8346 - Advanced Acting: Auditioning (3)

An acting class designed to develop auditioning skills and material as well as cultivate a working knowledge of the business of acting.
Prerequisite: Graduate with an undergraduate major or minor in theatre or permission of the instructor. Crosslisted as: THEA 4340.

## THEA 8436 - Directing I (3)

Directing I examines the development of the role of director in Western Theatre; provides practice in the directing process including script analysis, dramaturgical research, staging visual composition, collaboration with designers and performers; considers alternative approaches to directing and encourages students to begin to develop a personal directing style.

Prerequisite: Graduate standing with an undergraduate major or minor in theatre or permission of the instructor. Crosslisted as: THEA 4430.

## THEA 8446 - Directing II (3)

A practicum in play selection, analysis, casting, rehearsing and performing.

Prerequisite: THEA 8436. Crosslisted as: THEA 4440.

## THEA 8506 - Costume Design (3)

An introduction to the fundamentals of stage costume design, including line, silhouette, movement, color, texture and theatricality. Emphasis on the visual presentation of designs, including considerable work with life drawing and rendering technique.

Prerequisite: THEA 4550; ART 1100, 1210 or permission of instructor. Crosslisted as: THEA 4500.

## THEA 8516 - Costume Design (3)

An introduction to the fundamentals of stage costume design, including line, silhouette, movement, color, texture and theatricality. Emphasis on the visual presentation of designs, including considerable work with life drawing and rendering technique.

Prerequisite: THEA 4550; ART 1100, 1210 or permission of instructor. Crosslisted as: THEA 4510.

THEA 8556 - History of Costume (3)
A survey of the significant trends in Western dress and personal adornment from the Greeks to the 20th century. Additional research into non-western costume.

Prerequisite: Graduate standing. Crosslisted as: THEA 4550.

## THEA 8615 - Rendering and Scene Painting (3)

The methods and materials for presenting design ideas and the equipment and techniques used in painting scenery and properties for the theatre.

Prerequisite: Graduate student with an undergraduate major or minor in theatre or permission of instructor. Crosslisted as: THEA 3610.

## THEA 8616 - Scene Design (3)

Principles of composition, perspective and color for the stage; the designer's approach to the play, production of ground plans, elevations, sketches and models.

Prerequisite: THEA 1010, 2060, 2630 and junior. For 8616, graduate with an undergraduate major or minor in theatre or permission of the instructor. Crosslisted as: THEA 4610.

THEA 8650 - Technical Theatre Problems (3)
Research and dialogue in the aesthetics and physical results of the relationships between dramatic form, theatre architecture and scenic design and lighting from historical and contemporary points of view.

Prerequisite: THEA 1010, 3660, 4610, 4710, 4720 or permission.

## THEA 8665 - Stage and TV Lighting (3)

Characteristics and control of light and color and their application to the theatre and television; elementary electricity; lens systems; reflectors; lamps; control systems; automation.
Prerequisite: THEA 1010, 1630, 2060. Crosslisted as: THEA 3660.

## THEA 8726 - History of the Theatre Since 1700 (3)

A historical survey of theatre and its literature from 1700 to the present.

Crosslisted as: THEA 8726 and THEA 4720.
THEA 8736 - Seminar in Theatre History (3)
Selected subjects in theatre history from ancient to modern times. The subject of the course will change each year, according to the interest of the students and the instructor.

Prerequisite: Permission of instructor. Crosslisted as: THEA 4730.

THEA 8836 - Seminar in Dramatic Literature (3)
A seminar for graduate and advanced undergraduate students which will explore selected subjects in dramatic literature in-depth. Research papers and seminar reports will be required. The subjects and readings of the seminar will change from year to year. Intersections with other Dramatic Literature courses also are possible.

Prerequisite: Permission of the instructor. Crosslisted as: THEA 4830.

## THEA 8900 - Theatre Research Methods (2)

This course is designed to introduce graduate students in theatre to basic techniques of scholarly research: gathering material, defining the problem, and improving basic writing. Special emphasis will be placed on computer searches, resources available at UNOmaha, and community-based research.
Prerequisite: Admission to the graduate program in theatre.

## THEA 8910 - Research Methods II (1)

Research Methods II is a follow-up course to Research Methods. In this one credit course, graduate students will write drafts of their final thesis project proposals with the intention of being able to use them for official submission at the end of the spring semester.

Prerequisite: Graduate student in theatre and THEA 8900.
THEA 8920 - Dramatic Theory \& Criticism: Ancient Greeks to 1850 (3)

An introduction to selected dramatic theories and criticism from antiquity to the nineteenth century. This course is intended for graduate students with a strong background in dramatic literature and interest in theatre production.

Prerequisite: Graduate standing. Graduate students outside of theatre must have the permission of the instructor.

## THEA 8930 - Theatre in Our Community: Theory \& Criticism (3)

Students will apply dramatic theory and criticism to the theatre in our area. Students will visit different area theatres, analyze their work, and have discussions with their artistic directors.

Prerequisite: Graduate student.
THEA 8940 - Modern Theatre Aesthics: Realism \& Naturalism to 1980 (3)

Research and discussion on the aesthetic theories and movements in the modern theatre (Realism Naturalism of the 20th Century). Emphasis on primary source material from Meyerhold, Brecht, Artand, Grotowski, Schechner and others.

Prerequisite: Graduate standing.
THEA 8950 - Contemporary Theatre Aesthetics: 1980Present and Beyond (3)

This seminar is the chronological capstone for the theatre department graduate seminar series. It focuses on theories and practice in theatre during the last two decades with the aim of acquainting students with the most recent forces shaping current theatre in the U.S. and selected areas of the world.

Prerequisite: Graduate standing. Graduate students outside of theatre must have permission of the instructor.

## THEA 8980 - Final Project (1-3)

Final project for Option II or III.
Prerequisite: Admission to candidacy and approval of the project proposal.

## THEA 8990-Thesis (1-3)

Independent research project written under the supervision of an adviser.

THEA 8756 - Theatre and Social Justice (3)
THEA 8766 - Modern to 1980 (3)
THEA 8786-Classical to 1500 (3)
THEA 8796 - Renaissance to 1850 (3)
UBNS - Urban Studies

## UBNS 8000 - Seminar in Urban Studies (3)

This course provides an interdisciplinary overview of the forces influencing and influenced by urbanization and urbanism.

Crosslisted as: GEOG 8830.

## UBNS 8020 - Race, Ethnicity and American Urban Culture (3)

This course explores two central themes, race and ethnicity, which have played a dominant role in the shaping of American society and American culture.
Crosslisted as: BLST 8020.

## UBNS 8060 - Introduction to Urban Planning (3)

This course is an introduction to the development of urban planning as it has shaped and reacted to major trends in U.S. history. It provides students with major themes and traditions in the field of planning and includes planning practice, planning procedures and methods and contemporary issues in the field.

## UBNS 8200 - Community Organizing and Development

 (3)This course focuses on various theories and applications of organizing communities and neighborhoods to effect change. Of particular interest is the role of engaging citizens in improving their communities.

## UBNS 8820 - Comparative Urban Studies (3)

Emphasis is upon contrasting the cities of the developed and developing areas of the world
UBNS 8940 - Directed Research in Urban Studies (3)
The course is intended for advanced graduate students in urban studies. It is especially suited for those in-career students who have had their internships waived and who might profit more by in-depth research on a problem of urban studies rather than additional classroom courses.

Prerequisite: Completed 9 graduate hours in Urban Studies. Permission from the School. Crosslisted as: GEOG 8830 and GEOG 8840.

## UBNS 8980-Thesis (1-6)

A research project, designed and executed under the supervision of the chair and members of the graduate student's Thesis Advisory Committee. In this project, the student will develop and perfect a number of skills including the ability to design, conduct, analyze, and report the results in writing (i.e., thesis) of an original, independent scientific investigation. The project plan must be approved by the student's Thesis Advisory Committee.

Prerequisite: Graduate student in UBNS and approval of Thesis Advisory Committee.

UBNS 8066 - Introduction to Urban Planning (3)
THEA 8806 - Introduction to Urban Planning (3)

## WGST Womens and GenderStudies

## WGST 3130 - Women and Politics (3)

Women and Politics provides an overview of women's political participation including holding elective office, socialization, the feminist movement and its opposition, and public policies with particular impact on women. The focus is on contemporary perspectives on women in American political ideas and behavior. This course fulfils the Political Science department's American Politics field requirement.

Crosslisted as: PSCI 3130 and WGST 8135 and PSCI 3130 and PSCI 8135.

## WGST 4060 - History of Women in America from 1875

 - 1992 (3)This course examines the history of women in the United States from 1875 to 1992. Topics include law, work, sexuality and reproduction, immigration, civil rights, political participation and party politics, and changes to the American gender system, including family structure and employment.

Prerequisite: 4060: Junior or permission of instructor; 8066: Graduate standing. Crosslisted as: HIST 4060 and WGST 8066 and HIST 8066.

## WGST 4550 - Health Aspects of Aging (3)

This course emphasizes health promotion for older adults. Special health needs of older Americans are compared and contrasted with health needs for other age groups. Prevention or delaying of chronic diseases and disorders are emphasized.

Prerequisite: For 8556: Graduate. For 4550: six hours of health or permission of instructor. Crosslisted as: GERO 4550 and HED 4550 and GERO 8556 and HED 8556.

## WGST 4970 - Pro-Seminar (1-3)

Detailed study of narrower phases of literature, language, or culture.

Prerequisite: Permission. Crosslisted as: WGST 8976.

## WGST 8066 - History of Women in America from 1875 - 1992 (3)

This course examines the history of women in the United States from 1875 to 1992. Topics include law, work, sexuality and reproduction, immigration, civil rights, political participation and party politics, and changes to the American gender system, including family structure and employment.

Prerequisite: 4060: Junior or permission of instructor; 8066: Graduate standing. Crosslisted as: HIST 4060 and WGST 4060 and HIST 8066.

## WGST 8135 - Women and Politics (3)

Women and Politics provides an overview of women's political participation including holding elective office, socialization, the feminist movement and its opposition, and public policies with particular impact on women. The focus is on contemporary perspectives on women in American political ideas and behavior. This course fulfils the Political Science department's American Politics field requirement.

Crosslisted as: PSCI 3130 and WGST 3130 and PSCI 8135.

## WGST 8156 - Geography, Gender and Work (3)

This is an advanced undergraduate and graduate level seminar which focuses on the linkages among geography, gender and work. The course considers theoretical and methodological issues in addition to empirical perspectives. We begin by considering the nature of space, of gender, and of work, and progress through topics including the gendering of work and the geography of occupational segregation. Emphasis is placed on discussion, critical reading, and writing skills.

Prerequisite: Junior, senior, or graduate standing in a social science, or permission of instructor. Crosslisted as: GEOG 8156 and GEOG 4150 and WGST 4150.

## WGST 8476 - American Medicine and Public Health

 (3)Analysis of the relationship and interaction of medical thought and practice, public health problems and institutional development, and the changes in American society and culture from the 17th to the 20th century.
Crosslisted as: WGST 4470 and HIST 4470 and HIST 8476.

## WGST 8886 - Women's Issues in Social Work (3)

Topics and experiences in social work theory and practice pertaining to women's issues. Specifics will be announced when te course is offered. The topics selected will be consistent with faculty expertise and student needs. This course may be repeated for up to 9 hours ctedit.
Prerequisite: Permission of the School.

## WGST 8916 - Topics in Women's History (3)

A pro-seminar on selected topics based on a consideration of interpretive historical writings and or source materials.

## WGST 8976 - Pro-Seminar (1-3)

Detailed study of narrower phases of literature, language, or culture.

Prerequisite: Permission. Crosslisted as: WGST 4970.

## WRWS Writers Workshop

## WRWS 8116 - Fiction Studio (4)

A graduate studio in fiction writing with emphasis on such elements of craft as point of view, plot structure, and style. The course presumes the student is already familiar with basic techniques of characterization, scene and narrative structure, and storyline development. Repeatable one semester as WRWS 4100/8106.

Prerequisite: Graduate and permission of instructor based on writing sample. Crosslisted as: WRWS 4110.

## WRWS 8216 - Poetry Studio (4)

A graduate workshop in poetry writing with emphasis on such elements of craft as rhythm, imagery, lineation, diction, and metaphor. The course presumes the student is familiar with principles and practice of Twentieth Century poetry in English. Repeatable one semester as WRWS 4200/8206.

Prerequisite: Graduate and permission of instructor based on writing sample.

SITE MAP

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[^0]:    Excluding:
    MATH 8010 Statistical Research for Mathematics

[^1]:    This hearing will be conducted in compliance with the UNO Graduate Student Academic Appeal Policy. The student, $\qquad$ , has filed an appeal in conformity with the policies of the Graduate Council pertaining to the findings of a Graduate Program Committee. The Graduate Program Committee or other designated committee consisted of Professor $\qquad$ Chair; and Professors
    $\qquad$ and $\qquad$ as members. That
    committee heard the appeal on $\qquad$ and denied the

