Graduate Academic Catalog (1991-1992)

University of Nebraska at Omaha

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The University of Nebraska at Omaha

Graduate Catalog
1991-92
FIRST SEMESTER, 1991-92

July 1  Last day for submitting credentials for admission to Graduate Studies for First Semester, 1991-92.
July 4  Holiday. University closed.
August 19-22  General Registration.
August 23, 26-30  Change of class schedules.
August 26  First Semester begins at 7:00 a.m.; both day and evening classes.
August 30  Last day until 4:00 p.m. to: add a course to student's schedule; add an "Audit" course; change to "CR/NC" grade in a course.
September 2  Holiday. University closed.
September 3  Vacation. No classes.
October 18  Last day for filing applications for degrees to be conferred in December.
November 8  Last day until 4:00 p.m. to: drop a course with a grade of "W"; change a course to "Audit"; change from "CR/NC" to grade registration in a course.
November 27-29  Vacation. No classes.
December 2  Classes resume at 7:00 a.m.
December 2  Last day for submitting credentials for admission to Graduate Studies for Second Semester, 1991-92.
December 13  Last day of classes.
December 14-20  Finals.
December 21  Commencement at 10:00 a.m.

SECOND SEMESTER, 1991-92

January 6-9  General Registration.
January 7-9  Orientation.
January 10, 13-17  Change of class schedule.
January 13  Second Semester begins at 7:00 a.m.; both day and evening classes.
January 17  Last day until 4:00 p.m. to: add a course to student's schedule; add an "Audit" course; change to "CR/NC" grade in a course.
March 20  Last day for filing applications for degrees to be conferred in May.
March 22-29  Spring Vacation. No classes.
March 30  Classes resume at 7:00 a.m.
April 1  Last day for submitting credentials for admission to Graduate Studies for the First Summer Session, 1992 and for Evening Summer Session, 1992.
April 3  Last day until 4:00 p.m. to: drop a course with a grade of "W"; change a course to "Audit"; change from "CR/NC" to grade registration in a course.
April 5  Honors Day.
May 1  Last day of classes.
May 2-8  Finals.
May 9  Commencement at 10:00 a.m.

SUMMER SESSION, 1992

May 11-June 26  Evening Session "A."
June 1  Last day for submitting credentials for admission to Graduate Studies for Second Summer Session, 1992.
June 3-4  Registration.
June 8-July 10  First Summer Session.
June 8-9  Change of class schedule.
June 29 - August 7  Evening Session "C."
July 1  Last day for submitting credentials for admission to Graduate Studies for the First Semester, 1992-93.
July 3  Holiday. University closed.
July 6  Last day for filing applications for degrees to be conferred in August, 1992.
July 13 - August 14  Second Summer Session.
August 15  Commencement at 10:00 a.m.

The above dates are subject to change. Modifications in the academic calendar could be necessitated by emergency conditions.

On the cover: Psychology professor Sheldon Hendricks, Ph.D. conducts research on relationships between neural structures and behavior. Faculty members at the University of Nebraska at Omaha teach classes, perform research and counsel students. The students are composed of people of all ages, nationalities and interests. The University and its faculty are dedicated to helping them learn to earn a living and to live a cultured life, not as two processes but as one.
This Graduate Catalog is provided by the Graduate Faculty of the University of Nebraska at Omaha in the hope that it will be a source of information to you on the graduate programs available through our University. We are proud of our University and of its programs. We encourage you to become acquainted with us and with the many resources available to the community through the University.

The lamp of learning which you see on this page is the symbol of the scholarship and creative activity which characterizes every graduate program at the University of Nebraska at Omaha. It is this emphasis which distinguishes graduate studies from undergraduate studies.

We have tried to include as much information as possible, but obviously we could not include everything. If you have questions which are not answered here, please feel free to call on the Office of Graduate Studies, 204 Eppley Administration Building, telephone (402) 554-2341.

Margaret P. Gessaman, Ph.D.
Dean, Graduate Studies and Research
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The new centerpiece for the University of Nebraska at Omaha's campus, the Henningson Memorial Campanile, has become a landmark for students and the community.
SUMMARIES OF GRADUATE DEGREES OFFERED

All graduate degrees are awarded by the University of Nebraska, with each campus having the responsibility of establishing and maintaining individual standards and requirements. All departmental requirements must be in accord with the policies of the Graduate College of the University of Nebraska.

Master of Arts or Master of Science (M.A., M.S.)
A departmental or interdepartmental program for either the Master of Arts or Master of Science degree as approved by the Graduate Faculty will normally be arranged to conform to one of the following patterns:

Option I. A 30 semester-hour thesis program (including at least six hours of thesis and a minimum of 24 hours of non-thesis course work) as determined by the cognizant Graduate Program Committee.

Option II. A 36 semester-hour non-thesis program as determined by the cognizant Graduate Program Committee.

Master of Arts for Teachers of Mathematics (M.A.T.)
This is a specialized graduate degree designed to provide secondary school mathematics teachers with more depth in mathematics combined with a core of relevant professional courses in education.

Master of Business Administration (M.B.A.)
This is a professional graduate degree designed to provide a broad educational experience for students who wish to assume positions of responsibility in business.

Master of Music (M.M.)
This is a professional graduate degree designed to provide further professional development for the performer or additional study for the music educator.

Master of Professional Accounting
This is a professional graduate degree designed to provide an educational experience as a basis for a career in professional accounting.

Master of Public Administration
This is a professional graduate degree designed to provide broad educational experience for students who wish to assume positions of responsibility in government.

Master of Social Work (M.S.W.)
This is a professional graduate degree designed to provide knowledge, values and skills enabling the practitioner to intervene in behalf of individuals, families, groups and societal systems.

Specialist in Education (Ed.S.)
The Specialist in Education degree is an advanced graduate degree, involving a minimum of one year of study beyond the Master's degree. It is designed to offer additional study for professional educators.

DIRECTORY OF GRADUATE PROGRAMS

Departments or areas which have been authorized to offer graduate degrees and the degree(s) available in each are as follows:

Biology-M.A., M.S.
Business Administration-M.B.A.
Executive Master of Business Administration-M.B.A.
Civil Engineering-M.S.*
Communication-M.A.
Computer Science-M.A., M.S.
Counseling
  Agency Counseling-M.A., M.S.
  College Student Personnel Services-M.A., M.S.
  Gerontology-M.A., M.S.
  School Counseling/Elementary Level-M.A., M.S.
  School Counseling/Secondary Level-M.A., M.S.
Criminal Justice-M.A., M.S.
Computer Science-M.A., M.S.
Dramatic Arts-M.A.
Economics-M.A., M.S.
Educational Administration and Supervision-M.S., Ed.S.
English-M.A.
Geography-M.A.
Gerontology, Social-M.A., Graduate Certificate
Health, Physical Education and Recreation-M.A., M.S.
History-M.A.
Mathematics-M.A., M.S., M.A.T.
Music-M.M.
Political Science-M.A., M.S.
Professional Accounting
  Master of Professional Accounting
Psychology
  Educational Psychology-M.S.
  Industrial/Organizational Psychology-M.S.
  Psychology-M.A.
  School Psychology-Ed.S., Certificate
  Developmental Psychobiology-Ph.D.*
  Experimental Child Psychology-Ph.D.*
  Industrial/Organizational Psychology-Ph.D.*
Public Administration
  Public Administration-Master of Public Administration
Urban Studies-M.S.
Social Work-M.S.W.
Sociology
  Applied Sociology-M.S.
  Sociology-M.A.
Special Education and Communication Disorders
  Mental Retardation-M.A.
  Speech-Language Pathology-M.A., M.S.
  Resource Teaching and Learning Disabilities-M.S.
  Teaching the Emotionally Disturbed-M.S.
  Teaching the Hearing Impaired-M.S.
  Teaching the Mentally Retarded-M.S.
Teacher Education
  Elementary Education-M.A., M.S.
  Secondary Education-M.A., M.S.
  Reading-M.S.
  Urban Education-M.S.
Additional departments or areas have been authorized to offer courses for graduate credit, a minor or a graduate certificate as follows:

- Art-Minor
- Chemistry-Minor
- Engineering Mechanics-Minor
- Foreign Languages
  - French-Minor
  - German-Minor
  - Spanish-Minor
- Home Economics-Minor
- Philosophy and Religion
- Physics-Minor

* Application for admission to graduate studies in this program must be made through the Office of Graduate Studies at the University of Nebraska-Lincoln using the UNL Application for Admission form.

** The Ph.D. with specialization in Industrial/Organizational Psychology or Developmental Psychobiology is offered in conjunction with the Department of Psychology at the University of Nebraska-Lincoln. The Ph.D. with a specialization in Experimental Child Psychology is offered in conjunction with the Department of Educational Psychology and Measurements at the University of Nebraska-Lincoln. Application for admission to any of these programs must be made through the Office of Graduate Studies on the UNL campus using a UNL Application for Admission form.

In addition to the formal programs listed above, the University offers graduate work leading to selected endorsements/certificates in professional education. Information can be obtained from the College of Education. Students also may pursue graduate work as Unclassified students simply for the purpose of personal or professional advancement if admitted to graduate studies by a department/area. The latter opportunity is limited, and the student should inquire before trying to enroll.

SUMMARIES OF POLICIES AND PROCEDURES IN GRADUATE STUDIES

The following summaries are presented in the hope that they will provide convenient checklists for students and for the graduate student adviser. The summaries contain the critical information for students in all programs. Students should contact their advisers or the department/area Graduate Program Committee for specific information with regard to their programs. Details on all policies and procedures can be found in the text of this Graduate Catalog.

UNIVERSITY REGULATIONS

The student is advised to be familiar with the academic regulations of the University and of the Graduate College; the student is expected to assume full responsibility for knowing the relevant academic requirements. The student is also responsible for complying with all regulations of the University, the Graduate College and the departments of instruction as well as for meeting all degree requirements and deadlines.

NOTICE

Acceptance of registration by the University of Nebraska and admission to any educational program of the University does not constitute a contract or warranty that the University will continue to offer the program in which a student is enrolled. The University expressly reserves the right to change, phase out or discontinue any program.

The listing of courses contained in any University bulletin, catalog or schedule is by way of announcement only and shall not be regarded as an offer of contract. The University expressly reserves the right to:

- add or delete courses from its offerings,
- change times or locations of courses or programs,
- change academic calendars without notice,
- cancel any course for insufficient registrations, or
- review or change rules, charges, fees, schedules, courses, requirements for degrees and any other policy or regulation affecting students, including, but not limited to, evaluation standards, whenever the same is considered to be in the best interests of the University.

CONTINUOUS ENROLLMENT

Every reasonable effort will be made to enable students who maintain continuous enrollment in pursuing their degrees to follow the policies and requirements in effect at the time of their original admission. To maintain continuous enrollment a student must:

- enroll in both semesters of every academic year with summer enrollment optional or
- enroll only in the summer and in at least one summer session each year.

Students who have not maintained continuous enrollment and who have not been admitted to candidacy for the degree shall follow the regulations in the most recent Graduate Catalog.

Students who have not maintained continuous enrollment and who have been admitted to candidacy for the degree shall follow the regulations in the Graduate Catalog in effect at the time at which they were admitted to candidacy. All students are responsible for being aware of all changes in regulations which affect their graduate work.

STANDARDS OF GRADUATE STUDY

Graduate study deals with more complex ideas and demands more sophisticated techniques, searching analysis, creative thinking and time than undergraduate study. The research is extensive in both primary and secondary sources and a high quality of writing is expected.

A student seeking a graduate degree enjoys certain privileges not available to other students and is entitled to follow some procedures not required of those pursuing other objectives. Careful and prompt attention to required procedures should be followed in pursuing a master's degree program to prevent unnecessary confusion and delay. Although advising is available to assist students, students alone are responsible for following the procedures and completing the steps required in a program. Failure of an adviser to remind a student of a requirement or deadline date is not acceptable as a basis for waiver of the requirement.
SUMMARY OF ADMISSION PROCEDURES

1. In order to enroll in graduate courses taken at the University, a student must have been admitted to graduate studies at UNO. Exceptions can be made for students admitted to graduate studies on another campus of the University of Nebraska or for senior students nearing the completion of their undergraduate work; inquiries should be made in the Office of Graduate Studies.

2. In addition to the requirements listed below, international students and U.S. citizens whose language of nurture was not English must present a score on the Test of English as a Foreign Language (TOEFL). Automatic waivers are granted for persons who already have 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. A minimum score of 550 is required for admission of all those who must present a TOEFL score. (Please see page 24 for additional comments on procedures for students who language of nurture is not English. Any non-immigrant must provide a statement of available financial support. (Contact the Office of Admissions for details.)

3. Anyone wishing to apply for admission to graduate studies at UNO should:
   - Obtain an Application for Admission to graduate studies at UNO from the Office of Admissions, University of Nebraska at Omaha, 103 Eppley Administration Building, Omaha, Nebraska 68182.
   - Submit the completed application form with the required fee to the Office of Admissions.
   - Arrange to have an official transcript from each college or university previously attended sent directly to the Office of Admissions.
   - Read this Graduate Catalog carefully to learn what the department/area may require for admission in addition to the application form and transcripts.
   - Arrange to have the official scores on all required aptitude or advanced knowledge tests (GRE, GMAT or MAT) sent to the Office of Graduate Studies, University of Nebraska at Omaha, 204 Eppley Administration Building, Omaha, Nebraska 68182; applicants for Unclassified admission are not required to submit these test scores.

4. When the file in the Office of Admissions is complete, the Office will forward the file to the appropriate department/area for review. The applicant will be notified by mail when this is done.

5. The recommendation by the department/area Graduate Program Committee on admission of the applicant will be sent to the Dean for Graduate Studies and Research. All recommendations on admission are subject to the approval of the Dean.

6. The Office of Graduate Studies will officially notify each applicant by mail of acceptance or denial of the application. This notification will include the classification of admission, identified deficiencies, assignment of adviser, reason for denial (if appropriate), etc.

SUMMARY OF PROCEDURES FOR GRADUATE STUDENTS

1. Graduate students should meet regularly with their assigned advisers or with other departmentally approved advisers. At a minimum, before each registration period the students must meet with an adviser to arrange a class schedule for the upcoming semester; an adviser's signature or computer card is required for each registration.

2. In order to be eligible to receive a graduate degree, students must be formally admitted to candidacy for the degree; this is a process distinct from admission to graduate studies in the degree program. Students should file an application for admission to candidacy for the degree after successful completion of between six and the last 18 graduate hours taken at the University of Nebraska. See the section entitled, "Admission to Candidacy for the Degree" for further information. Official notification of admission to candidacy for the degree will be mailed to students by the Office of Graduate Studies. If such notification is not received within a reasonable time, the students should call the Office of Graduate Studies.

3. If the approved plan of study includes a thesis, students should follow all instructions included in the section entitled, "Thesis Option."

4. Students should visit the Office of Graduate Studies at least once a semester to insure that their files are complete and in order.

5. All students are required to pass final comprehensive examinations before receiving a degree. The final comprehensive examinations are normally taken near the end of the degree program. Students should notify the department/area Graduate Program Committee at the beginning of the semester in which they plan to take the examinations.

6. During what is expected to be the semester of graduation and prior to the posted deadline, students should make application in the Office of the Registrar for the conferral of the degree. If application is made in one semester, but requirements are not met in that semester, reapplication must be made in the next semester; no additional fee is required to reactivate the application.

7. Students must pay all fees and fines and satisfy all obligations to the University at least 12 working days before conferral of the degree.

8. Students wishing to participate in the Commencement ceremony must order a cap, gown and hood from the Bookstore.
GRADUATION CHECKLIST

Apply for graduation. See Academic calendar in this catalog or contact the Registrar's Office for deadline. If you apply for graduation and do not complete all of the requirements in time to graduate, notify the Graduate Studies Office as soon as possible so that your name can be removed from the graduation list. You must reapply for graduation the following term; no additional fee is charged to reactivate your application.

Make arrangements to take final comprehensive examinations with your department.

"Incompletes"and "NR" grades from a previous term must be removed so that the grade will be in the Graduate Studies Office at least 12 working days before graduation.

Pay all fees and fines and satisfy all obligations to the University at least 12 working days before graduation.

Order a cap, gown and hood from the Bookstore.

PLEASE ADD THE FOLLOWING IF YOUR APPROVED PROGRAM INCLUDES A THESIS, THESIS-EQUIVALENT PROJECT, OR A FIELD PROJECT:

Obtain a copy of "Instructions for the Preparation of Thesis" from the Graduate Studies Office.

A "Supervisory Committee for a Thesis Program" form must be on file at the Graduate Studies Office at least one semester before graduation.

Make arrangements with your department for oral exams and defense of thesis or field project.

Call the Graduate Studies Office before the defense and a copy of the Degree Completion Report will be sent to your department. This must be signed by the Supervisory Committee after approval of the thesis. Return form to Graduate Studies Office promptly.

The approved thesis, thesis-equivalent project or field project must be deposited in the Graduate Studies Office together with the proper number of copies at least 12 working days before graduation. The thesis binding fee must be paid in the Registrar's Office prior to depositing the thesis/field project.

CHECKLIST FOR ACCEPTABLE THESIS, THESIS-EQUIVALENT PROJECT AND FIELD PROJECT:

Receipt of payment for total number submitted for binding. (At this time it is $7.50 per copy.)

Are three enough copies? Minimum required is two. Check with your department as to their requirements.

Check rag content and paper weight. At least 25 percent rag content watermarked bond paper of 20 lb. weight for the original and copy for the Library.

The text must be double-spaced, except for quotations.

Must be typewritten with black ribbon using pica or elite type. Word processors can be used but the test must be printed on a letter-quality printer. NO DOT MATRIX.

Check margins. A left hand margin of one and one-half inches, right hand margin of one inch, and top and bottom margins of one and one-fourth inches each.

Check that photographs, maps and drawings will not be obscured when bound.

Check that pages are numbered in arabic numerals at the inside edge of the right hand margin at least five-eighths of an inch from the top edge of the paper.

Are the title page, acceptance page and table of contents in the appropriate format?

If in doubt about paper or print quality please bring a sample to the Graduate Studies Office for approval.

The manuscripts must be submitted in individual protective envelopes, labeled with your name in the upper left hand corner.

FOR THESIS OR THESIS-EQUIVALENT PROJECT ONLY:

An abstract no more than two pages in length and conforming to the thesis or thesis-equivalent project in respect to margins and spacing must be placed in the thesis or thesis-equivalent project following the acceptance page.
ADMINISTRATION OF GRADUATE STUDIES
The administrative Office of Graduate Studies on the UNO campus is located in 204 Eppey Administration Building. The office of the UNO Dean for Graduate Studies and Research, general information material and copies of all required forms can be found there. The office of the Dean of the Graduate College, University of Nebraska at Omaha, is located in Room 227 of Varner Hall, Lincoln.

ORGANIZATION OF GRADUATE STUDIES
University of Nebraska
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 University-wide Graduate College with one Graduate Faculty. The ultimate academic authority for all graduate programs within the University is vested in the approximately 1500 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, comprising 30 Members elected by the faculty of the Graduate College and five graduate student members. Specific responsibilities of the Dean and of the Executive Graduate Council can be found in the "University of Nebraska Graduate College Governance Document."

University of Nebraska at Omaha
On each campus of the University on which graduate programs are offered, there is a campus Dean for Graduate Studies, a campus Graduate Faculty and a campus Graduate Council. The UNO Dean for Graduate Studies and Research 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 for Graduate Studies and Research, 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 15 elected faculty members and three graduate student members. Specific responsibilities of the Dean of Graduate Studies and Research and of the UNO Graduate Council may be found in the "Organization of Graduate Studies: University of Nebraska at Omaha."

COMMITMENT TO RESEARCH
We are a University committed to research; What does this mean to you as a student?

It means that the same faculty members teach both undergraduate and graduate courses and that these instructors create knowledge as well as transmit it. They spend a large portion of their time engaged in research in libraries and laboratories and out in the field.

At UNO you are taught by the people making discoveries, so you learn the latest finds on every front. You may exchange ideas with faculty members who are authorities and you may participate in research experiencing the discovery of new knowledge.

FACULTY SCHOLARSHIP
Teaching, research or creative activity and professional services are the common currency of scholars engaged in the tasks of higher education, and as a central role of any university is the production and dissemination of basic and applied knowledge, and as the roles of teaching, research or creativity and professional service are inextricably linked, and as excellence in one area alone does not constitute a sufficient contribution to the University community; the University of Nebraska at Omaha Graduate Council expects that productivity in research or creative activity be an essential part of faculty personnel recommendations.

GRADUATE FACULTY
Graduate Faculty Members
Responsibilities
Graduate Faculty Members may teach graduate courses, supervise students enrolled in subdoctoral graduate programs, serve on the final examining committees for these students and vote on any matters presented to the Graduate Faculty including the election of the Executive Graduate Council and the Graduate Council for their specific campus.

Criteria
The following requirements for the nomination of Graduate Faculty Members were adopted by the Graduate Faculty to establish consistent standards for faculty members eligible for appointment to carry out these assignments:

• The nominee must hold the rank of Assistant Professor or above.
• The nominee must hold the terminal degree normally accepted for academic employment in the discipline or its clear equivalent as determined by the Graduate Program Committee of the nominee's department or interdepartmental area.
• The nominee will as part of his or her regular duties be actively involved in graduate student research and/or graduate teaching.
• The nominee must have demonstrated clear evidence of scholarly activity and potential beyond teaching. This evidence must be provided by the nominator.
Graduate Faculty Fellows

Responsibilities
Graduate Faculty Fellows may teach graduate courses, supervise and serve on supervisory committees for students working toward post-baccalaureate degrees, vote on all matters presented to the Graduate Faculty and vote on nominations for Graduate Faculty Fellows.

Criteria
The following requirements for the nomination of Graduate Faculty Fellows were adopted by the Executive Graduate Council to establish reasonably consistent standards for faculty members eligible for appointment to supervise doctoral students:

- The nominee must be a Graduate Faculty Member or meet all criteria for Graduate Faculty Membership.
- The nominee must have published research and scholarly work of quality, or have demonstrated comparable creative achievement.
- In disciplines where publication is the normal outlet for scholarly work or research, the nominator must provide evidence of the nominee's significant, refereed publications appearing under the imprint of recognized scholarly publishing houses or journals. Publication must have resulted from a judgment of quality by an editorial board.
- Publication based on the nominee's terminal degree alone is not sufficient, although publication of the dissertation or parts of it is significant if the nominator indicates the manner in which the published version represents a substantial amount of scholarly work in addition to that required for the dissertation.
- In disciplines such as art, architecture, theatre or music where publication is not the normal or singular end product, the nominator must provide evidence of creative work accomplished by the nominee. This creative work must bear evidence of acceptance by peers within the discipline.
- The nominator must indicate current involvement of the nominee in research and/or creative work.
- The nominator may provide supporting evidence for the nominee such as published textbooks related to graduate education, published instructional materials, published professional reports or evidence of funded research and development projects.
- The nominator may provide evidence of the nominee's teaching effectiveness in working with graduate students. This evidence may consist of peer and student evaluations or reports of student achievement subsequent to the receipt of advanced degrees.

GRADUATE STUDENT ADVISERS

Upon admission to graduate studies in a graduate department, each student is assigned an adviser by the Graduate Program Committee. The adviser is responsible to the student and to the Graduate Program Committee for insuring that the student's work, including the plan of study, satisfies all requirements of the program and of the Graduate College. To assure accountability and maintenance of the standards, policies and procedures of the Graduate College, all graduate advisement must be provided by Members or Fellows of the Graduate Faculty (with exceptions possible only for persons with a primary advisement role under the direct supervision of a Member or Fellow). A change of adviser requires official action.

SUPERVISORY COMMITTEES

Some graduate programs require the establishment of a supervisory committee for each student. In particular, each student under Option I (page five) must have a supervisory committee. Each committee is appointed by the Dean for Graduate Studies and Research based upon recommendation of the Graduate Program Committee. The committee shall consist of at least two voting Graduate Faculty Members from the student's graduate department and at least one voting Graduate Faculty Member from another department. In addition, other qualified persons may be appointed to ex-officio (non-voting) status if it is believed that they can provide needed expertise or that they could gain valuable experience by participating on the committee. If the student is under Option I, the chairperson of the committee shall be considered the student's thesis adviser. The Supervisory Committee sheet must be on file in the Graduate Studies Office at least one semester before graduation.
GRADUATE STUDIES AT UNO:  
HISTORY AND PURPOSE  
For the more than 80 years since its founding in 1908, the University of Nebraska at Omaha 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 1931 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 five additional Professional Master's degrees. In 1974 the cooperative program with UNL leading to the Ph.D. in three areas of psychology was approved.

Graduate studies are intended to provide more advanced education than the undergraduate work upon which all graduate programs are based. At UNO graduate students are provided with the following opportunities:
• to work toward the various graduate degrees offered by the University;
• to earn graduate credit for the issuance or renewal of certificates for teachers, administrators and educational psychologists;
• to obtain personal or professional enhancement.

To enable the student to attain these objectives, the Graduate Faculty 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.

ACCREDITED STANDING  
The accreditations listed below indicate the concern of the faculty and administration of the University of Nebraska at Omaha 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.

The University of Nebraska at Omaha is accredited by the North Central Association of Colleges and Secondary Schools, and has programs which are accredited or approved by the National Council for Accreditation of Teacher Education, the National Council on Social Work Education, the Engineers Council for Professional Development, Technology Accreditation Commission/Accreditation Board for Engineering and Technology, National Association for Industrial Technology, the American Home Economics Association (for undergraduate programs), the American Dietetic Association, the American Assembly of Collegiate Schools of Business, the National Association of Schools of Music (undergraduate programs), the National Association of Schools of Public Affairs and Administration, the Educational Standards Board of the Boards of Examiners in Speech-Language Pathology and Audiology, the National Recreation and Park Association/American Association for Leisure and Recreation, and the American Chemical Society. Its courses are accepted for purposes of teacher certification by the Nebraska State Department of Education.

GENERAL INFORMATION  
Affirmative Action/Politis Prohibiting Discrimination and Sexual Harassment

It is the policy of the University of Nebraska that students on each campus of the University of Nebraska shall be admitted and enjoy the programs and privileges of the University without regard to individual characteristics other than qualifications for admission, academic performance and conduct in accord with University policies and rules and laws applicable to student conduct.

Employees on each campus of the University of Nebraska shall be employed and equitably treated in regard to the terms and conditions of their employment without regard to individual characteristics other than qualifications for employment, quality or performance of duties and conduct in regard to their employment in accord with University policies and rules and applicable law.

The University of Nebraska at Omaha reaffirms its desire to create an environment for all students and employees that is fair and responsible — an environment which is based upon one's ability and performance. To that end, it is the policy of the University of Nebraska at Omaha to administer all of its educational and employment programs and related supporting services and benefits in a manner which does not discriminate because of an individual's race, color, sex, religion, national origin, age, disability, marital status, political affiliation, Vietnam-era veteran status or sexual orientation.

It is further the policy of the University of Nebraska at Omaha that sexual harassment will not be condoned or tolerated. Sexual harassment is defined as any unwanted communication of a sexual nature, whether verbal,
physical, written, or pictorial, which has the purpose or effect of intimidating the person receiving the communication, or any solicitation of sexual contact of any nature when submission to or rejection of such contact is used as the basis for either implicitly or explicitly imposing favorable or adverse terms and conditions of academic standing or employment.

Appropriate corrective action will be taken in those instances where the foregoing policies have been violated. Any student or employee who is found to have violated any of the foregoing policies will be subject to disciplinary action.

Further, the University commits itself to a program of affirmative action to encourage the application of minority, women and handicapped students, to identify and eliminate the effects of any past discrimination in the provision of educational and related services, and to establish organizational structures and procedures which assure equal treatment and equal access to the facilities and educational benefits of the institution for all students.

The University of Nebraska at Omaha complies with all applicable laws promoting equal educational and employment opportunity and prohibiting unlawful discrimination, including those addressing the obligations of the institution under Title VII of the Civil Rights Act of 1964, as amended, Title IX of the Education Amendments of 1972, as amended, and Sections 503 and 504 of the Rehabilitation Act of 1973.

For further information on these policies, students should contact the Vice Chancellor for Educational and Student Service, 211 Eppley Administration Building, 554-2779; faculty should contact the Vice Chancellor for Academic Affairs, 203 Eppley Administration Building, 554-2262; and staff should contact the Affirmative Action Officer, Personnel Services, 205 Eppley Administration Building, 554-2321.

Privacy Act

In compliance with the Family Education Rights and Privacy Act of 1974, the University of Nebraska at Omaha guarantees students access to official records directly related to students and an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading or otherwise inappropriate. The institution must obtain the written consent of students before releasing identifiable data about students from records to other than a special list of exceptions.

An explanation of this Act and its application at UNO is available to all students. Copies may be obtained at the Office of Student Activities, the University Information Center, the Registrar’s Office, the Orientation Office or the Office of the Vice Chancellor for Educational and Student Services.

Expectations In the Classroom

Attendance

Classes are conducted on the premise that regular attendance is desirable and expected. The individual instructor has the responsibility for managing student attendance and for communicating at the beginning of each semester those class attendance policies which prevail in that classroom.

If a student is absent or anticipates an absence, the student’s primary responsibility is directly to the instructors, and the student should consult with them accordingly. A student who misses a class is nonetheless responsible for information and assignments communicated during that class session. If students discover that they are to be absent for an extended period, they should promptly notify the instructors and be prepared to document the reason for extended absences.

Instructors or other University officials who may require students, individually or collectively, to be absent from their classes due to a field trip or similar officially recognized activity are responsible for providing adequate information to the students involved so that the students may provide notice to other instructors.

Behavior

Section 5.0 of the Bylaws of the Board of Regents of the University of Nebraska states:

“Students, like all members of the academic community, have the responsibility to create and support an educational environment. Each member of the community should be treated with respect and dignity. Each has the right to learn. This right imposes a duty not to infringe upon the rights of others. The academic community should assure its members those opportunities, protections and privileges that provide the best climate for learning.”

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 Sponsored Projects, 202 Eppley Administration Building.

Academic Honesty

All students at the University of Nebraska at Omaha are expected to conduct their academic affairs in an honest and responsible manner. Any student found guilty of dishonesty in academic work shall be subject to disciplinary actions. Acts of academic dishonesty include, but are not limited to:

• plagiarism*, i.e., the intentional appropriation of the work, be it ideas or phrasing of words, of another without crediting the source;
• cheating, i.e., unauthorized collaboration or use of external information during examinations;
• assisting fellow student in committing an act of cheating;
• falsely obtaining, distributing, using or receiving test materials or academic research materials;
• submitting examinations, themes, reports, drawings, laboratory notes, research papers or other work as one's own when such work has been prepared by another person or copied from another person (by placing his/her own name on a paper, the student is certifying that it is his/her own work); or
• improperly altering and/or inducing another to improperly alter any academic record.

Additionally, graduate students are more likely to assume roles as active scholars. With these roles come added responsibilities for academic honesty. For such individuals academic honesty requires an active pursuit of truth not just an avoidance of falsehood. This pursuit includes but is not limited to:
• providing a full and complete representation of any scholarly find, be it experimental data or information retrieved from archives;
• taking care that the resources of the University (e.g., library materials, computer, or laboratory equipment) are used for their intended academic purposes and that they are used in a manner that minimizes the likelihood of damage or unnecessary wear;
• assuring that one's co-workers are given due credit for their contributions to any scholarly endeavor;
• respecting a diversity of opinion and defending one's colleagues as well as one's own academic freedom;
• respecting the rights of other students who may come under the tutelage of the graduate student and being fair and impartial in grading and other forms of evaluation; and
• seeking permission from an instructor when submitting to that instructor work which the student has submitted for a course taken in the past or intends to submit for another course currently being taken.

In cases of alleged academic dishonesty, the instructor shall attempt to discuss the matter with the student and explain the sanction(s) which he/she plans to impose. In the event that the student challenges the allegation of academic dishonesty, or is not satisfied with the sanction(s) imposed by the instructor, the student may file an appeal according to the approved appeal policies of the University of Nebraska Graduate College.

"By plagiarizing, a student is, in effect, claiming credit for another individual's thinking and expression. Whether the student has read or heard of the information used, the student must document the source of information. When utilizing written sources, a clear distinction should be made between quotations (which reproduce information from the source word-for-word within quotation marks) and paraphrases (which are restatements of the source information produced in the student's own words). Both direct quotations and paraphrases must be documented. Even though a student paraphrases, condenses or selects from another person's work the ideas are still the other person's and failure to give credit constitutes misrepresentation of the student's actual work and plagiarism of another person's idea. Purchasing a paper or copying another person's work and handing it in as the student's personal work is plagiarism and misrepresentation."

From the Oakland University Graduate Catalog, 1987-89

Plagiarism

The prevention of plagiarism and the imposition of sanctions upon those who resort to plagiarism is 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 Faculty

The investigation of allegations of plagiarism by a faculty member at any major administrative unit of the University of Nebraska shall be the responsibility of the Academic Freedom and Tenure Committee of that campus.

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.

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 course work, 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.

ACADEMIC SERVICES

University Library

The University Library, centrally located on the UNO campus, offers many services to its users and contains materials and facilities for study and research. The collection encompasses approximately 623,000 volumes; 4,300 journal and newspaper subscriptions; 430,000 government documents; 1,120,000 microforms; plus audio and video cassettes and other media. Back issues of periodicals in bound volumes and in microform are maintained. As a partial government documents depository, the University Library collects most federal and Nebraska state publications. A collection of local documents also is maintained. Nearly all of the Library's collection is on open shelves and is arranged according to the Library of Congress classification system. Most of the Library's holdings are accessible through an online catalog, GENISYS (General Information System).
GENISYS is available through terminals in the Library, via ethernet, and by modem from remote locations.

UNO students, faculty and staff may check out library materials with their UNO ID card at any of the three University of Nebraska campuses. A reciprocal borrowing agreement also allows anyone with a UNO ID to check out materials from 30 other Nebraska college and university libraries. Community users may obtain a borrower's card for a small annual fee.

Qualified staff are available to aid students. Reference librarians answer questions at the Reference Desk, assist individual students with their research, and give lectures to classes on the use of the Library in general and on the materials of specific subject areas as requested. Each librarian serves as liaison to one or more departments in his/her area of subject expertise. The Reference Department provides on-line data base searching of over 200 data bases on a cost recovery basis as well as an access to CD-ROM data bases. Assistance is available for government documents, current periodicals, reserve materials, and audio-visual and microform material and equipment. When needed material is not available in the UNO collection, the Interlibrary Loan Division can borrow it from other libraries for UNO students and faculty.

Handouts with information about the Library’s collections and its many services are available on the main floor. The University Library is open 91 hours per week during the fall and spring semesters. Slightly shorter hours are observed during the summer and intersessions. Study areas include tables, chairs and individual study carrels. Photocopiers are available on the lower level.

Computing and Data Communications

The Office of Computing and Data Communications is responsible for managing all facets of academic and administrative computing and data communications on the University of Nebraska at Omaha campus. The staff consists of 19 full-time employees and 35 part-time student employees. Main offices are located in 110 Eppley Administration Building (EAB), phone 554-2468. Computer Operations 008 EAB; 554-3500, is open 24 hours per day all year long.

This major support-service function offers a full range of automated data processing services to students, faculty and staff. Continued upgrading of computing capabilities provides the University with modern up-to-date equipment and techniques. Interactive computing, computer graphics and computer-assisted analysis/research are a part of everyday academic life. The computer as a tool is integral to virtually all fields of study, research and administration.

The administrative computing function on the UNO campus supports the Student Information System (SIS) which resides on the IBM 3084OX in Lincoln. The system is currently accessed and maintained via on-line terminals in the Admissions, Financial Aid, Registrar, Student Account areas as well as in all colleges and academic departments. Other campus-specific administrative computing applications run on a VAX 11/780 and include maintenance of accounting data-bases for intracampus billings and the library serials system.

The academic computing capability centers around a Digital Equipment Corporation (DEC) Virtual Architecture Extended (VAX) 8650 mainframe computer with 48 megabytes of memory and three gigabytes of mass storage. Thirty-six dial-up lines allow off-campus access to the DEC VAX 8650. The Math-Computer Science Department has a multi-processor Sequent computer running the UNIX operating system and is used primarily for instruction/research in system design and systems management. The Department of Geography/Geology has two large Sun workstations and a sizable array of sophisticated computing equipment, some used for satellite imagery processing for earth science research projects.

In addition to the foregoing, UNO contracts with external agencies time-share leases on an IBM 3084QX and an IBM 4381.

Three open access/general purpose microcomputer labs are available to students and faculty seven days a week. There are an additional 16 microcomputer labs located in the colleges and departments which are dedicated to college/department-specific and unique instructional and research requirements. These labs are equipped with over 300 Zenith (IBM compatible) and Macintosh microcomputers and well over 300 terminals. High speed printers, laser printers and dot-matrix printers also are available. Consultants are provided for student assistance in the Durham Science Center and College of Business labs. These labs are primarily for classroom work; however, many students use them for independent research projects.

For data communications, UNO employs five computer networking architectures: the Xerox developed ETHERNET System, the IBM developed System Network Architecture (SNA), the AT&T engineered Information Systems Network (ISN), IBM's Token Ring and the Novell System. Through telephone lines and a fiber optic link, the computer center can access the computers located on the Lincoln campus. Additionally, the campus is a member of CREN, MIDNET and NSFnet, allowing students and faculty access to supercomputers and over 2,300 other academic research centers.

The Training and Computer Information Center offers a number of computer courses at no cost to students, faculty and staff, and is UNO's primary office for consulting services on hardware and software. The Center maintains a large library of technical reference and instructional material.

Telephone assistance is provided for students, faculty and staff by the Help Desk located in 005 Eppley Administration Building; 554-DATA (554-3282).
Funding for Graduate Student Research
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 and funding agencies external to the University can be obtained from the Office of Sponsored Projects, 202 Eppley Administration Building.

Student Organizations
A wide variety of student organizations makes it possible for students to find activities to fit their academic and avocational interests. Among the over one hundred student organizations are departmental, honorary, professional, sports and service organizations, as well as student government. Professional fraternities and honorary organizations provide social contacts with other students while giving members more practical understanding of their chosen fields. For further information about student organizations, students are advised to contact the Office of Student Activities in the Milo Bail Student Center or individual departments.

TUITION, FEES, DEPOSITS AND REFUNDS
Tuition and related fees are payable in full at the time of registration, or in accordance with delayed billing schedules. Students availing themselves of the delayed billing option must familiarize themselves with the due dates, as publicized. Note: failure to receive the mailed billing notice will not excuse the student from payment responsibility, nor the late payment penalties. Students in need of financial aid must consult the Student Financial Aid Officer in the Eppley Administration Building. Application for financial aid should be made at the earliest possible time.

Courses which are added or registrations which occur after the completion of the fourth week of classes must be paid in full prior to processing by the Registrar’s Office. Students waiting until after the final due date for payment of tuition and fees to register or add courses will be required to pay the late registration fee or change of program fee, whichever is applicable, and the late payment fee. With the exception of the Bookstore, the University does not accept bank cards for payment of any financial obligation.

Registration is not complete until cleared by the Cashier. Failure to pay tuition or fees when due, or to meet payments on loans when due, may result in cancellation of registration, legal collection efforts and withholding of grades and transcripts. Outstanding financial obligations from previous semesters must be paid prior to Registration. Failure to do so may prohibit registration for the current and future semesters.

The University reserves the right to change the amount of tuition or fees at any time and to assess charges for laboratory fees, breakage, lost property, fines, penalties, parking, books, supplies, food or special services not listed in this schedule.

Graduate Application Fee (Graduate College)
Application Fee .................................... $ 25.00

Tuition (Per Semester_Credit Hour)
Programs administered by the University of Nebraska at Omaha:
Undergraduate
Resident of Nebraska
(see residency statute)........................ $ 47.50
Non-Resident........................................ $ 128.25
Per Student Credit Hour
Off-Campus Program ........................... $ 57.25
Graduate
Resident of Nebraska
(see residency statute)........................ $ 59.25
Non-Resident........................................ $ 140.75
Per Student Credit Hour
Off-Campus Program ........................... $ 68.25

Programs administered by UNL and other
UNL-administered colleges:
Undergraduate
Resident of Nebraska
(see residency statute)........................ $ 53.50
Non-Resident........................................ $ 145.50
Graduate
Resident of Nebraska
(see residency statute)........................ $ 71.00
Non-Resident........................................ $ 175.00

Audit Fee
The audit “not for credit” fee is set at one-half of the resident undergraduate or graduate tuition rate. For classes offered through the off-campus program, the audit “not for credit” fee is set at one-half of the off-campus undergraduate or graduate tuition rate. In addition, students registering for audit must pay the appropriate UPFF fee. Registration for audit requires the permission of the instructor and is subject to available class space after credit registration ends. Students who register to take a course for credit and who later change to audit registration will be required to pay the full resident or non-resident tuition rate. Audit fees are refundable in accordance with the Tuition Refund Schedule.

Laboratory/Special Instructional Fees
Students enrolling in the following course sections are advised that laboratory/special instructional fees are mandatory for services and are charged accordingly.

Arts and Sciences
Biology 1020 Lab Fee................................ $ 5.00
Biology Lab Fee...................................... $ 7.00
Chemistry Lab Fee.................................. $ 6.00
Communication Lab Fees
BRCT 3320, 3330, 4450, JOUR 3110 ................ $ 15.00
BRCT 2310............................................ $ 14.00
BRCT 2320............................................ $ 6.00
English 1050/1100 Lab Fee......................... $ 2.50
English Reading Lab Fee............................ $ 5.00
Foreign Languages:
- All 1000- and 2000-level courses .................................. $ 6.25
- Foreign Languages: All 2050 courses........................................ 25.00
- Geography 1030, 1060, 1070 Lab Fee.............................. $ 5.00
- Geography 1030 Field Trip.............................................. 3.00
- Geology 1170, 1180, 2754, 2764, 3104, 3450 Lab Fee.................. $ 5.00
- Geology 1170, 3104, 3310 Field Trip.................................. 3.00
- Math 1314, 1324 Lab Fee................................................ $ 4.50
- Microcomputer Lab Fee.................................................. $ 5.00
- Physics 1034, 1054, 1154, 1164, 1754, 3500, 3540, 3560 Lab Fee. $ 5.00
- Psychology 1024 Lab Fee................................................ $ 5.00
- Psychology 3234 Lab Fee................................................ $ 5.00
- Radio Lab Fee.............................................................. $ 6.00
- TV Laboratory Fee........................................................ $ 6.00
- Television Lab Fee....................................................... $ 15.00
- Engineering Technology
  - EET 1040, 1090, 2060, 2430, 4620 ......................................... $ 10.00
  - EMEC 1110, 1120, CET 2000, 2020, DDET 1230, 1240, 1250, IST 3230 $ 15.00
  - IST 2160................................................................. $ 17.00
  - IST 1170, 2110........................................................ $ 18.00
  - IST 3830................................................................. $ 19.00
  - CET 2300, IST 1160, 1180, CET 2130................................. $ 20.00
  - IST 2200, 2204........................................................ $ 22.00
- Fine Art
  - Art History Slide Usage Fee............................................. $ 5.00
  - Art Lab Fee.............................................................. $ 20.00
  - Ceramics Lab Fee..................................................... $ 20.00
  - Dramatic Arts 1580, Film Text Pass Fee............................ $ 14.00
  - Hand-Produced Book Lab Fee 3200................................... $ 20.00
  - Listening Lab Fee.................................................... $ 3.00
  - Papermaking Lab Fee 3530............................................ $ 20.00
  - Sculpture Lab Fee.................................................... $ 20.00
- Music
  - Music Equipment and Maintenance Fee.............................. $ 15.00
- Applied Music
  - Mandatory for enrollment in voice and all instruments:
    - One credit hour.................................................... $ 60.00
    - Two credit hours................................................ $ 120.00
    - Three credit hours............................................... $ 180.00
- Home Economics
  - Textiles, Clothing and Design 2220, 2250............................. $ 10.00
  - Other laboratory/special instructional fees may be charged as authorized by the University. Please refer to the semester Class Schedule to determine which of the above fees are related to specific courses.

Conference, non-credit and off-campus contract course fees are determined for each offering based upon the cost factors and peculiar circumstances involved.

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**University Program and Facilities Fee (UPFF)**

| All students (full- and part-time) per semester | $ 54.75 |

This fee is assessed to every student each semester. $12.00 of this fee is designated for Campus Recreation.

The UPFF receipts are divided into two separate funds: Fund-A Student Fees and Fund-B Student Fees. Fund-A Student Fees are established and allocated by the elected Student Government subject to the approval of the Chancellor of the University of Nebraska at Omaha in accordance with Board of Regents policy.

Fund-A Student Fees are refundable upon request in accordance with guidelines and procedures established and published by the Vice Chancellor for Educational and Student Services. Students requesting and receiving a Fund-A refund will no longer be entitled to the student activities supported by Fund-A Student Fees.

Fund-B of the UPFF is designated for services, staff salaries, maintenance of facilities and related expense, and those additional items designated by the Chancellor. This portion is budgeted separately with emphasis upon continuing support. The Vice Chancellor for Educational and Student Services submits the projections to the Chancellor, who in turn submits the projections to the President and the Board of Regents for final approval.

**Photo I.D. Fee**

| Assessed to all full- and part-time students per semester | $ 1.00 |

**Special Service Fees**

| Transcripts of Academic Record first copy | $ 3.00 |
| Additional copies (same order) | $ 1.00 |
| Thesis Binding (per copy) | $ 7.50 |
| Change of Program Fee (per each change of program) | $ 5.00 |
| Cap and Gown Rental (to be arranged through the Bookstore) | $ TBA |
| Graduation Fee | $ 3.00 |
| Degree in Absentia (payable in addition to graduation fee) | $ 2.00 |
| Returned Check (per check) | $ 8.00 |

Dishonored checks given in payment for tuition and fees must be redeemed in cash prior to the date for late registration, otherwise the late registration fee will be assessed in addition to the returned check fee. If a check which was issued either for payment of the minimum registration deposit or payment of a past due account to release a “stop enrollment” is returned unpaid by the drawer bank and full restitution is not made within 10 days, check-writing privileges shall be suspended, current semester tuition and fees shall become due in full and the individual shall be recommended for immediate disenrollment.
Teacher Placement Fees
Registration and Credential Fee
New Registrants (first year) .................. $ 38.00
Fee covers establishment of permanent placement file, seven sets of credentials, and the weekly Vacancy Bulletin available from the Office.
Alumni Re-registrants (yearly fee) .................. $ 45.00
Fee covers update of placement credentials information, addition of new recommendations, 10 sets of credentials, and the Vacancy Bulletin if picked up in the Office.
Extra Credential Fee, over initial seven sets (each) .................. $ 4.00

Late Fees and Penalties
Late Registration (day or evening classes) .................. $ 10.00
Late Payment of Tuition Billing .................. $ 20.00
Reinstatement of Cancelled Registration .................. $ 10.00
Replacement of ID/Activity Card .................. $ 5.00

Deposits
Key (per key with authorization/refundable) .................. $ 5.00
ROTC Uniform Deposit Refundable .................. $ 20.00
HPER Locker Deposit Refundable .................. $ 7.50
HPER Building locker, lock and towel services are available to students and Campus Recreation Activity Card holders (faculty/staff).

To renew lockers for the next semester or retrieve deposit and personal articles, it is necessary to personally come by HPER 100 by the end of the semester or summer session.

Required of students taking HPER service classes. Also required of faculty, staff and students using Field House facilities.

Testing Fees
Credit by Examination, College-Level
Examination Program (CLEP)* .................. $ 37.00
Credit by Examination per course (Departmental)** .................. $ 25.00
Correspondence Tests .................. $ 5.00
Graduate Management
Admission Test (GMAT) .................. $ 30.00
Graduate Record Examination (GRE) .................. $ 35.00
Law School Admission Test (LSAT)** .................. $ 63.00
Miller Analogies Test (MAT) .................. $ 30.00
Test of English
as a Foreign Language (TOEFL) .................. $ 31.00

*Plus 50 percent of resident tuition for credit earned.
**Plus 50 percent of resident tuition for credit earned. The $25.00 testing fee will be applied to the tuition cost.
***Additional fee for LSDAS (See Registration packet).

Refund Schedule
Refunds are computed from the date application is received by the Registrar, NOT from the date of withdrawal from classes. See policy entitled "Withdrawal from Classes." The University Program and Facilities Fee and Photo Fee are not refundable.

Students paying tuition and fees on a deferred payment basis or under any other loan granted by the University, who withdraw before the account is paid in full are not relieved from payment of the balance due. Refunds will first be applied to unpaid balances, and any remaining balance must be paid. Failure to do so will prohibit registration for future academic semesters.

Refunds for withdrawals are figured from the official beginning of the semester as stated in the University's academic calendar, not from the beginning of students' individual class schedules. Refunds will be made by University Warrant, and will normally take six to eight weeks to process.

Students who receive financial assistance and withdraw during the refund period may have to repay all, or a portion, of their financial aid received. A financial aid recipient should first contact the Office of Financial Aid prior to any official withdrawal from the institution.

Regular Semester
First week of classes, 100 percent refunded.
Second week of classes, 75 percent refunded.
Third week of classes, 50 percent refunded.
Fourth week of classes, 25 percent refunded.
Fifth week of classes, 0 percent refunded.

Summer Sessions (5 and 6 Week)
Before first official day of semester, 100 percent refunded.
First three days of classes, 100 percent refunded.
Remainder of first week, 50 percent refunded.
Second week of classes, 25 percent refunded.
Third week of classes, 0 percent refunded.

Summer Evening and Special Contract (7 and 8 Week)
Before first official day of semester, 100 percent refunded.
First three days of classes, 100 percent refunded.
Remainder of first week, 75 percent refunded.
Second week of classes, 50 percent refunded.
Third week of classes, 25 percent refunded.
Fourth week of classes, 0 percent refunded.

Non-Credit and Special Course (10 Weeks or More)
Withdrawal before classes start, 100 percent refunded.
Withdrawal before first week elapsed, 50 percent refunded.
Withdrawal before two weeks elapsed, 20 percent refunded.
Withdrawal after two weeks elapsed, 0 percent refunded.

(Less than 10 Weeks)
Withdrawal before classes start, 100 percent refunded.
Withdrawal before second class, 50 percent refunded.
Withdrawal after second class, 0 percent refunded.
DEAD WEEK
The last week of regularly scheduled classes during fall and spring semesters is designated as Dead Week.
Except for makeup examinations, tests in self-paced courses, post-tests 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 Dead Week may be due during this period.

INTERSTATE RECIPROCITY AGREEMENT
FOR GRADUATE EDUCATION
Under an agreement between the Board of Regents of the University of Nebraska and the Board of Curators of the University of Missouri, graduate students meeting the regular in-state requirements of the University of Missouri shall be regarded as in-state students at the University of Nebraska, with respect to admission requirements, tuition and fees, scholarships, fellowships and assistantships and other benefits normally available to Nebraska residents.

FINANCIAL AID FOR GRADUATE STUDENTS
Presidential Graduate Fellowships
Each year two Presidential Graduate Fellowships are awarded to graduate students who are in the final year of their programs. The Fellowships are designed to allow outstanding students to concentrate their efforts on the completion of their thesis or course work and do not require the performance of any duties. Information about criteria, nomination procedures and selection procedures are available at the Graduate Studies Office, 204 Eppley Administration Building.

Graduate Assistantships and Policy Governing Graduate Assistantships
Graduate Assistantships are available for qualified students who are enrolled in a graduate degree program. The Assistantships offer assignments in teaching, research or laboratory supervision designed to provide opportunities for supervised educational experiences at the graduate level. Interested students should make inquiries in their department/area about the availability of Assistantships and the procedures for applying. The application and supporting credentials should be on file in the department/area by March 1 for consideration.
A Graduate Assistantship entitles the holder to a waiver of tuition costs up to 12 hours of graduate credit per semester. Most Graduate Assistants are also eligible for tuition waivers during the summer sessions. Graduate Assistants may apply for a Graduate Assistant tuition waiver for undergraduate-level course work that is required to meet a deficiency identified in the evaluation of the Graduate Assistant’s application for admission and is the basis for provisional admission to the graduate program in the Assistant’s respective department/area. The application must be recommended in writing by the adviser and departmental/area Graduate Program Committee; approval must be given by the Dean for Graduate Studies and Research.

There are a limited number of half-time Graduate Assistantships available on this campus. No tuition remission is awarded to half-time assistants.

The following policy governing Graduate Assistantships at UNO was passed by the UNO Graduate Council:

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 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 program.

Recruitment and Selection of Graduate Assistants
Each graduate department or other departmental/area unit as appropriate, which awards Graduate Assistantships, shall establish its own procedures for 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 classwork or assistantship duties are not carried out in a satisfactory manner.

Work Load
The work load 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 .5 FTE. The department 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 work load (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 per semester. However, two five-week summer sessions shall be equivalent to one semester. Graduate Assistants may not register for more than 12 semester hours. 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.

Duties
Duties assigned to Graduate Assistants should be directly related to and in support of graduate studies in
their chosen field of study. The individual Graduate Program Committees should be allowed to assign graduate assistants research and/or teaching activities that they feel are appropriate as long as the needs of the program and the Graduate Assistants are being met. Typical examples would be one or more of the following:

- Teaching courses or discussion sections at the undergraduate level;
- Instructing and supervising undergraduate-level laboratories or tutorial sections;
- Grading or otherwise evaluating academic performance of undergraduate students;
- Collecting and/or processing research data for faculty members;
- 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 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, 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.

Length of Appointments

Assistantships may be awarded on an academic-year basis, a calendar-year basis, or semester-by-semester basis. Students working toward a master’s degree may not hold an assistantship for more than four semesters; Educational Specialist students are limited to four semesters beyond the master’s degree; and 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 the recommendation of the Graduate Program Committee of the Department and the approval of the Dean of Graduate Studies and Research.

Justification of New Assistantships

In order to obtain permission to create new Assistantships, whether funded by state appropriations or by outside grants, a brief statement of justification should be submitted for approval of the cognizant College Dean and the Dean for Graduate Studies and Research prior to being sent to the Vice Chancellor for Academic Affairs. This statement should contain:

- qualifications necessary on the part of applicants;
- expected duties;
- relevance of the duties to the student’s graduate training; and
- justification for the Assistantship (as opposed to other job titles).

Deletion and Redistribution of Graduate Assistantships

Presently established Graduate Assistantships which are supported by state funds are allocated to the various departments within each College by the Dean of the College. These Assistantships may, therefore, only be recommended for deletion by the cognizant Dean. Such proposed recommendations must be submitted to the Dean for Graduate Studies and Research for review and recommendation prior to being sent to the Vice Chancellor for Academic Affairs. Assistantships supported by outside funding normally will be terminated automatically when the funding ceases. No special approval is required in such cases. The Dean for Graduate Studies and Research should also be notified of any proposed redistribution of Graduate Assistant lines from one department to another.

Regents’ Tuition Waivers

Regents' Tuition Waivers are available for a limited number of graduate students who have been admitted to a graduate degree program. Eligibility is based on academic qualifications and financial need. Awards are made on a competitive basis. Information and application forms are available from the Office of Graduate Studies, Room 204, Eppley Administration Building.

Student Financial Aid

Stafford Loan, SLS Loan, certain scholarships, Perkins Loan and College Work-Study are all forms of financial assistance for which UNO graduate students may be considered on the basis of financial "need.” In order to apply, a student should submit a Family Financial Statement (FFS) to ACT Student Financial Services (Iowa City, Iowa) preferably by March 1 prior to the academic year for which assistance is needed. FFS forms and other, more detailed information about financial aid opportunities, are available from the Office of Financial Aid, 103 Eppley Administration Building.

Perkins Loan

The Perkins Loan program provides low-interest loan assistance to eligible graduate students. The current interest rate is five percent; however, interest accrual and loan repayment do not begin until nine months after the recipient graduates, or drops to less than half-time status. Full-time enrollment (nine graduate credit hours) is required before the Perkins Loan funds can be disbursed each semester.

College Work-Study

Graduate students may be considered for College Work-Study assistance, a type of federal aid that provides part-time employment opportunities on campus. Eligible students are paid at least the minimum wage according to the number of hours worked each pay period and an attempt is made, whenever possible, to place students in employment positions related to their fields of study.
Enrollment on at least a one-half time basis (four graduate credit hours) is required to participate in the program.

**Stafford Loan**

The Stafford Loan Program enables eligible students with "financial need" to borrow funds directly from a bank, credit union or other lender to help pay the expenses of their college education. The maximum loan amount per nine month period is $7500 for graduate students. The current interest rate is eight percent; however, interest does not begin to accrue and repayment does not start until six months after the recipient graduates or drops to less than one-half time status. Submission of a Stafford Student Loan Request, available from the Office of Financial Aid, is required in addition to the Family Financial Statement and enrollment on at least a one-half time basis (four graduate credit hours) is mandatory before Stafford funds can be disbursed.

**SLS**

The SLS program provides loan assistance to independent graduate students, even though with "financial need." The current SLS interest rate is 12 percent with a maximum loan amount per academic year of $4,000. SLS application forms and information are available from most lenders, and from the Office of Financial Aid. Submission of the Family Financial Statements is required, and enrollment on at least a one-half time basis is mandatory before SLS funds can be disbursed.

**Scholarships**

Several scholarship programs at UNO have been established to recognize exceptional scholastic potential and performance by graduate students. Scholarship funds are provided for UNO by corporations, clubs, community organizations and friends of the University. To be considered for scholarship selection, a UNO Scholarship Application must be submitted by March 1 each year.

Each of the awards is based upon factors stipulated by the donors. UNO offers scholarships to the most worthy, promising applicants who meet the qualifications, one of which is often financial "need." Therefore, graduate students are encouraged to complete and submit the Family Financial Statement by March 1 each year. Transfer students must complete one academic year of coursework at the University before scholarship consideration will be given.

Scholarships specifically earmarked for graduate students include, but are not limited to, the following awards:

- American Indian
- Ezra Kohn Student Research
- Emley Graduate
- Marilyn Martin-Major
- Nelle Boyer/Phi Delta Gamma
- Claire Parker/Phi Delta Gamma
- Mary Ellen Patterson/Phi Delta Gamma
- Lincoln Frost Social Work
- Helen Hansen Graduate
- Rhoden Graduate
- Indian Fellowships
- Ernest Wise Social Work

In addition, graduate students may wish to personally contact the Office of Graduate Studies and Research to inquire about eligibility for assistantship opportunities, fellowships and the Regents' Graduate Tuition Waiver program.

**Short-Term Loan Funds**

Short-term loan assistance is made available by such donors as the faculty and staff of UNO, the Alumni Association, Faye L. Hickey, Ben Garman, Alpha Kappa Delta, Sigma Gamma Rho, Phi Delta Gamma, UNO Parents Association and Rotary International. Loans from $50 to $200 may be received and repayment within 30 days is normally required. Application and eligibility information may be obtained from the Office of Financial Aid.

**Tuition Refund/Aid Repayment**

Students who receive federal financial assistance (other than College Work-Study) and who withdraw or drop to less than half-time status during the tuition refund period will have any tuition refund returned to the aid account from which the assistance was originally authorized. A student who withdraws may also have to repay a portion of the financial aid received. A financial aid recipient should contact the Office of Financial Aid prior to withdrawal from the University.

**Service to Disabled Students**

Disabled students seeking financial assistance are required to complete all required applications for aid, meet published deadlines for submitting applications, and verify "need" for assistance. Assistance in completing all applications for financial aid will be provided by the office upon request.

**Standards of Satisfactory Academic Progress**

Federal regulations require that a student attending an educational institution maintain satisfactory progress in the course of study he/she is pursuing in order to receive financial assistance. The purpose of this policy is to ensure that limited federal financial assistance is disbursed only to those students sincere about pursuing and obtaining their educational objectives.

In order to comply with these regulations, the University of Nebraska at Omaha has established the following standards of satisfactory academic progress. All continuing and former graduate students who have completed at least two semesters of UNO coursework, and who apply for financial aid, must meet these standards before federal assistance can be authorized. Transfer students may receive financial aid for their first and second semesters of UNO coursework without meeting these standards.

The standards for a continuing or former student will be checked following the completion of each semester for which the student enrolls.
Standards
- A full-time or part-time graduate student must successfully complete ("D" grade or higher) at least one-half of the total credit hours in which he/she registers during the last two semesters of attendance at UNO. Grades earned of Failing (F); No Credit, Failing (NC); Unsatisfactory, Failing (U); Incomplete (I); Withdrawn (W and WX); and Audit (AU) are considered unsuccessful completion of credit hours. The four-session summer period (May through August) is considered one semester for purposes of this policy.
- A graduate student must also be in good academic standing at UNO. This is defined as having earned a cumulative grade point average of at least 3.0.
- A student pursuing a graduate degree program may not receive further financial aid if more than 55 graduate credit hours have been completed (90 hours if accepted to the M.S.W. or Ed.S. program).

Reinstatement of Eligibility
Failure to meet any of the standards will cause a student’s financial aid record to be “flagged” for review. The student will be allowed to receive federal financial aid for one additional "reinstatement" semester. However, the student must also submit a written appeal to request that he/she be permitted to continue receiving assistance, should the standards be met at the completion of the "reinstatement" semester. If the standards are still not met at the completion of the "reinstatement" semester, the student may be allowed to re-enroll, but will normally be ineligible to receive further federal assistance.

Transfer Students
A graduate student wishing to receive financial aid to attend UNO must arrange to have a Financial Aid Transcript sent to the UNO Office of Financial Aid from each college or university previously attended. This requirement must be met even though no financial aid may have been received at the previous school(s). Financial Aid Transcript forms are available from the UNO Office of Financial Aid; however, it is the student’s responsibility to ensure that all required Financial Aid Transcripts are provided to UNO. Disbursement of aid cannot take place if this requirement is not fulfilled.

STUDENT DEVELOPMENT SERVICES
Career Planning and Placement Services
Career Placement Services assists undergraduates, graduate candidates and alumni from all Colleges of the University in their search for career employment.

Employment counselors aid in assessing students’ career goals and identifying related employment opportunities. Literature on local and national employers, career fields, job descriptions, salary surveys, employment trends and job-search techniques are also available. All UNO students can receive personal assistance in resume preparation.

Graduate students completing degrees are encouraged to register with Career Placement Services by completing a placement file, including resumes. The College Placement Annual is a valuable directory of organizations who recruit college graduates and is available to registrants and is free for registered seniors and alumni.

Teacher credentials are prepared and maintained for candidates completing requirements for certification. A complete listing of local and regional teacher vacancies is available to all teacher candidates.

Career Placement Services offers two basic programs:
On-Campus Recruiting
Each semester local and national employers seeking December, May and August graduates visit the campus to conduct interviews with candidates registered with the office. Interested students need to contact the office for specific recruiting dates and sign-up activities.

Career Placement Services sponsors programs covering numerous career employment topics. These include a career information day in the fall and a teacher preparation day in the spring. Job-Readiness Workshops are offered each semester to help students develop interviewing skills and job-search materials, i.e., letters of application, resumes and other employment tools.

Candidate Referral
Throughout the year, local and regional employers contact the office seeking potential employees. Career Placement refers qualified candidates directly to these employers and assists in arranging candidate interviews.

An effort is made to obtain positions for registered candidates; however, employment cannot be guaranteed.

Students are encouraged to visit Career Placement Services in 111 Eppley Administration Building. Office hours: 8:00 a.m. to 7:00 p.m. Monday and Tuesday, 8:00 a.m. to 5:00 p.m. Wednesday through Friday; 554-2333.

Career Development
The career development process assists students, faculty, staff and alumni in exploring career alternatives and making career decisions. Specific career development services are offered through both the Counseling Center, 115 Eppley Administration Building, and Career Planning and Placement, 111 Eppley Administration Building.

By exploring the many career alternatives in terms of one’s interests, values, needs, abilities and aspirations, individuals will be able to develop career goals consistent with their particular lifestyle. To explore and clarify that personal and unique potential, one may become involved in individual counseling, workshops, testing and test interpretation through the Counseling Center. A comprehensive career information library is available in Career Planning and Placement to assist individuals and groups in exploring the world of work, with up-to-date information on employment trends, occupational responsibilities and working conditions, as well as required training and qualifications for hundreds of different career fields.
Office hours for both the Counseling Center (554-2409) and Career Planning and Placement (554-2333) are 8:00 a.m. to 7:00 p.m., Monday and Tuesday; 8:00 a.m. to 5:00 p.m., Wednesday-Friday.

COUNSELING SERVICES

Counseling Center

Counseling services are provided to assist UNO students in their educational, emotional-personal and social development. The goal of the Counseling Center is to use all available resources to assist students in making positive adjustments in their academic and personal lives.

The Counseling Center provides a professionally qualified resource team who will assist students in making academic, personal and vocational decisions with the assistance of various assessment tools. The student may talk confidentially with counselors about concerns regarding family and personal problems, friends and financial difficulties.

Testing is provided by the UNO Testing Center after consultation with a counselor. While there is no single test or group of tests that will "magically" reveal the information a person is seeking, the Counseling Center is expertly able to assist students to a clearer understanding of themselves. Interpretations and explanations of the results of these tests are provided by counselors from the Counseling Center. Further examination of educational, personal and career opportunities can be developed from the exploration of information gained from the test results and counseling sessions.

General counseling services are provided at no charge for students and other members of the University community. Appropriate fees are charged for services to people who are not affiliated with the University. The Counseling Center acts as a referral agency for students, opening the availability of a large number of university and community professional resources for the student.

The Counseling Center is located in 115 Eppley Administration Building and is open 8:00 a.m. to 7:00 p.m. Monday and Tuesday and 8:00 a.m. to 5:00 p.m. Wednesday through Friday. The telephone number is 554-2409.

Services for the Disabled

This service unit provides counseling for disabled students as well as providing a forum to discuss and initiate needed services for the students. In compliance with the Rehabilitation Act of 1973 (Section 504) a disabled student who is enrolled in a course located in a "non-accessible" room may request:

• to be transferred to another section of the course which is accessible; or
• to have the location of the course changed to an accessible room.

Students may initiate requests for transfer of course sections or room assignment in the Office of the Registrar. The 504 Coordinator at UNO is the Vice Chancellor, Educational and Student Services, 211 Eppley Administration Building, 554-2779.

Interpreter Services for the deaf are available to qualified applicants; for more information, contact the Counseling Center.

If you are disabled and wish to receive information concerning available services, please complete the "special needs information" section on the application for admission or contact the Coordinator for Counseling, Counseling Center, 115 Eppley Administration Building, 554-2409.

Health Services

Health Services are available free of charge to all students. Nominal fees may be charged for some laboratory tests. Health Services, located in the Milo Bail Student Center and is open Monday through Thursday from 8:00 a.m. to 6:00 p.m. and Friday from 8:00 a.m. to 5:00 p.m. Physician appointments are available 20 hours per week, including both morning and afternoon appointment times. First-aid treatment for minor illnesses and accidents, with referrals when necessary, are also available. Preventive health measures are a primary concern and include blood-pressure checks, vision tests and flu shots. Programming related to alcohol and drug awareness is coordinated through Health Services.

Applications must be made through Health Services for both temporary and permanent handicapped parking permits. The telephone number is 554-2374.

Health Insurance for Students

All UNO students, both graduate and undergraduate, carrying six or more hours have the option of contracting for accident and sickness insurance through a group plan made available by the University with a commercial insurance carrier at reduced premiums. Graduate students needing less than six hours to complete degree requirements are also eligible for this plan. If you are not protected for accident and sickness under a policy held by your parents, or one that you or your spouse have purchased privately, you are encouraged to participate in this or some other health care plan. Coverage for injury and sickness is the full responsibility of each student. The current student health insurance plan is a unique plan with no deductibles and provides 100 percent payment for most medical treatment when rendered by a physician or hospital affiliated with Option One, a local preferred provider organization. For additional information, contact Health Services, Milo Bail Student Center, 554-2374.

Multicultural Affairs

In support of other University services, the Office of Multicultural Affairs develops and administers programs designed to recruit and retain students of color. The office collects and disseminates information concerning opportunities in higher education for the racial/ethnic population of metropolitan Omaha and the state of Nebraska. The office also coordinates cultural and academic programs designed to enhance multicultural awareness of the UNO campus, as well as assist other on- and off-campus agencies which hold similar missions. The Office of Multicultural Affairs is located in 115 Eppley Administration Building, 554-2248.
Testing Center
A variety of testing services are available through the UNO Testing Center, located in Room 113, Eppley Administration Building. Among these are the Graduate Record Examination, Miller Analogies Test, Graduate Management Admission Test, Law School Admission Test, Test of English as a Foreign Language and Medical College Admission Test. Graduate students also may utilize the Testing Center's aptitude, interest and psychological testing services. These exams are administered on a daily basis upon the recommendation of UNO Counseling Center personnel.

No graduate credit may be earned by examination; however, students applying for entrance into graduate school should consider Credit by Examination for completion of undergraduate requirements where possible. These may be met through either of two types of Credit by Examination available at UNO: The College-Level Examination Program (CLEP) which offers tests for credit in many subject areas; and UNO's Special Examination Program which involves challenging for credit any undergraduate course taught at the University by taking a departmental examination.

Learning Center
The Learning Center offers a variety of academic support skills designed to aid all students. Services offered at the Center include tutorials, study skills workshops and seminars, and individualized learning assessment of study and learning styles. A microcomputer lab is available for student use along with a variety of computer-assisted instructional software. Make certain to contact the Center to see when the activities you need to participate in are being held. Office hours are from 8:00 a.m. to 7:00 p.m. Monday through Thursday, 8:00 a.m. to 5:00 p.m. Friday, and 9:00 a.m. to noon on Saturday. The Center is located in 117 Eppley Administration Building; 554-2992.

Student Employment Services
UNO students seeking off-campus or on-campus, work-study or part-time employment should visit Student Employment Services in 111 Eppley Administration Building.

Employment counselors are available to assist students in finding employment, matching job with career interest where possible. Programs about job search skills and interviewing techniques offered by Career Planning and Placement Services are available to all students.

Students seeking part-time and full-time summer jobs may utilize our services. A Career Fair is sponsored each year which provides students with an opportunity to meet and interview with interested employers on campus.

Current listings of available jobs are posted on bulletin boards outside 111 Eppley Administration Building.

Students are referred directly to employers for job interviewing. All services are free. Office Hours: Monday through Friday, 8:00 a.m. to 5:00 p.m.; 554-2885.
ADMISSION TO GRADUATE STUDIES AT UNO

Every applicant for admission to graduate studies at UNO should understand that graduate work is not a simple extension of an undergraduate program but, rather, demands scholarship of a higher order, and emphasizes research, creativity and professional competence.

Admission Procedures and Regulations

A summary of the procedures for admission to graduate studies at UNO can be found on page seven. An Application for Admission must be filed not only by those students desiring to work for a degree, but also by students desiring graduate credit for a renewal of a teacher’s certificate, for professional development or for graduate credit to be transferred to some other university. In order to receive graduate credit for any courses taken at UNO, the student must have received an official Certificate of Admission to graduate studies at UNO, must have been admitted to graduate studies at another campus of the University of Nebraska or must have received special permission as a senior.

Please be aware that notification of acceptance by a department Graduate Program Committee or faculty member is advisory only. Admission is granted solely by the Dean for Graduate Studies and Research.

All credentials received in connection with an application for admission to graduate studies at UNO become the property of UNO. Under no circumstances will they be duplicated, returned to the applicant or forwarded to any agency or other institution.

In order to be considered for admission in a given semester, all documents must have been submitted to the Office of Admissions no later than the following deadlines for:

- Fall Semester — July 1
- Spring Semester — December 1
- First Summer Session — April 1
- Second Summer Session — June 1

The above deadlines are the minimum requirements for all programs. Some programs have earlier deadlines. For example:

Students in the MBA program are admitted only three times a year and applicants must have credentials on file by July 1 for the Fall semester and by December 1 for the Spring Semester and for the Summer Sessions.

Students in the Counseling programs are admitted only twice each year and applicants must complete all requirements for admission by March 30 for either Summer Session and for the Fall Semester and by October 31 for the Spring Semester.

Special Procedures for Students Whose Language of Nurture is not English

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) along with their application for admission.

Automatic waivers from this policy are granted for persons who already have 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.

A minimum score of 550 is required for admission of all those who must present a TOEFL score. If the minimum score is not attained, the admission application shall be forwarded to the program’s Graduate Program Committee with the TOEFL score. The Graduate Program Committee may recommend to the Dean for Graduate Studies and Research that the applicant be admitted on the basis of other evidence of the applicant’s language skills in English and potential for success in graduate work at UNO.

Students whose language of nurture is not English must also contact the Office of Admission concerning the filling out of the required financial statement.

The above requirements are in addition to any requirements established by any individual Graduate Program Committees.

Admission to a Degree Program - Categories

Unconditional Admission

Unconditional admission to graduate studies may be granted to an applicant who satisfies all the following conditions:

- Has earned a baccalaureate degree from a regionally accredited institution;
- Has earned at least a "B" average in the undergraduate work in the proposed graduate major and minor (if applicable);
- Has earned at least 15 semester hours of undergraduate work that meet specific requirements of the departments in the proposed major and minor (if applicable);
- Has submitted appropriate scores on the required aptitude or advanced knowledge tests to the Office of Graduate Studies.

Provisional Admission

Students who have not met all the conditions for unconditional admission may still be admitted to the program. However, departments and/or the Dean for Graduate Studies and Research 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 in the undergraduate work in the proposed graduate major and minor (but in no case less than a "C" average). 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" in each course involved in the first 12 hours of graduate study. A grade of "C" or below in any of these courses will result in automatic dismissal.
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" average, providing all other requirements are met.

Provisional admission occasionally may be granted to seniors at this University 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 their 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. Seniors are allowed to enroll only in courses designated 8–5 or 8–6. 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 the University of Nebraska at Omaha.

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 changed by the recommendation of the Graduate Program Committee and approved by the Dean for Graduate Studies and Research. Provisional status is automatically changed to Unconditional status upon admission to candidacy for the degree.

Admission to Unclassified (Non-Degree) Status

Unclassified admission is available in some departments/areas 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 reviews these applications and the student may, in fact, be turned down for this category as with other categories.

Information on the availability of this option may be obtained from the department/area or from the Office of Graduate Studies. In particular, the MBA program does not admit students to Unclassified status.

NOTE: Successful completion of graduate courses as an Unclassified student does not obligate a graduate department/area to accept those courses for credit toward the fulfillment of degree requirements. Students who have enrolled under the Unclassified designation and who subsequently decide that they wish to pursue a graduate degree must complete and file a Request for Change form with the Office of Graduate Studies. If admission to a degree program is sought and granted, the applicant must obtain prior approval of the cognizant department/area to accept such credits.

Unclassified status, such course credit(s) may be accepted toward a degree at the discretion of the cognizant Graduate Program Committee. An approved Request for Change must be accompanied by a departmental recommendation if any specified credit hours earned while in the Unclassified status are to be counted toward the degree.

Special Permission to Register for Graduate Credit

Seniors at an Accredited Institution

Seniors at an accredited institution (including UNO) who have obtained in advance the approval of the appropriate campus Dean for 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" average in the undergraduate major. Seniors are allowed to enroll only in courses designated 8–5 or 8–6. 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 the University of Nebraska at Omaha.

Temporary Admission

When unexpected circumstances preclude processing applications for Unconditional, Provisional or Unclassified admission, the Dean for Graduate Studies and Research may issue a Temporary Admission. The temporary admission category may be used only once by a student unless the student did not register for courses during the semester the temporary was used. A student enrolling with temporary admission must, within the first eight weeks of the semester, furnish the Office of Admissions with all materials required by the cognizant department/area (including official transcripts of all graduate and undergraduate work, one of which must show an earned baccalaureate degree or the equivalent, or a statement from the graduate office of another institution indicating that the student is in good standing in a graduate-level degree program at the institution). During the summer sessions the student has two weeks to provide this information. Students who fail to furnish such materials will be disenrolled by the Dean for Graduate Studies and Research from all graduate courses during the eight-week period (two weeks in the summer), and will not be permitted to attend classes beyond that date. Students seeking admission to a degree program must realize that even if all admission materials are presented, the Graduate Program Committee evaluating these materials may deny admission to the program. If this occurs, a determination will be made as to whether the student may continue graduate studies in the Unclassified status or will be disenrolled from all graduate courses.

Seniors at this University who apply for graduate studies using the temporary admission application may enroll only in courses designated 8–5 or 8–6.

Graduate Students from Another Campus of the University of Nebraska

Students who have been admitted to graduate studies at another campus of the University of Nebraska may register for graduate courses at UNO by using an Intercampus Registration Form. Copies of the form and information on its use can be obtained from the Office of Graduate Studies at any campus.
REQUIRED APTITUDE OR ADVANCED KNOWLEDGE TESTS

The scores on nationally recognized aptitude or advanced knowledge tests are used by some Graduate Program Committees to provide evidence of an applicant’s potential to perform at the graduate level and to provide guidance in the development of an appropriate plan of study for each student admitted to the degree program. The UNO Graduate Faculty recognize the following tests, subject to department/area selection, for this purpose: the Graduate Record Examination (GRE), the Graduate Management Admission Test (GMAT) and the Miller Analogies Test (MAT).

A student with Unclassified status is not required to submit scores on aptitude or advanced knowledge tests. Admission requirements for each degree program are determined by the cognizant Graduate Program Committee.

The following graduate programs require that a score on the indicated standardized test(s) must be on file prior to admission:

- Biology – GRE General Aptitude required, Advanced GRE encouraged.
- Business Administration – GMAT
- Counseling – MAT and other specialized tests designated by the department
- English – GRE General Aptitude or MAT
- Graduate Record Examination
- Professional Accounting – GMAT or GRE General Aptitude
- Psychology – GRE General Aptitude
- Social Gerontology – GRE General Aptitude or MAT
- Social Work – GRE General Aptitude or MAT
- Sociology – GRE General Aptitude
- Special Education and Communication Disorders – GRE General Aptitude or MAT
- Anesthesiology
- Geography (Students are encouraged, however, to include GRE General Aptitude scores as supporting evidence when applying, especially if they are interested in a graduate assistantship.)
- Health, Physical Education and Recreation
- History
- MAT (Mathematics for Teachers)
- Mathematics
- Public Administration/Urban Studies

The GRE, GMAT and MAT are administered at many sites throughout the nation and the world. At UNO, the tests are given under the supervision of the Coordinator of the Testing Center, Eppley Administration Building. Information, registration forms and testing dates are available from the Testing Center or from the Office of Graduate Studies. A fee is charged and advance registration may be required. Students should request the scores be sent to the Office of Graduate Studies; applicants for the Master of Business Administration or for the Master of Professional Accounting programs should also request that the scores be sent to the College of Business Administration or to the Accounting Program, respectively.

Graduate Record Examination

Unless otherwise specified, all students are required to submit scores on the general aptitude portions of the Graduate Record Examination. The advanced area test is also required in some departments/areas; students should contact their department/area for information.

Graduate Management Admission Test

Applicants for admission to the Master of Business Administration or to the Master of Professional Accounting programs are required to take the Graduate Management Admission Test or the Graduate Record Examination prior to admission. Some other departments/areas accept the GMAT or the general aptitude portions of the GRE.

Miller Analogies Test

With department/area approval, graduate students in a number of programs may take the Miller Analogies Test or the Graduate Record Examination general aptitude portions. Applicants for admission into graduate programs in Counseling must take the MAT prior to admission.

Test of English as a Foreign Language

The Test of English as a Foreign Language (TOEFL) international examination is administered at many sites throughout the world, including the UNO Testing Center. In addition, a local administration, the results of which can be used only at UNO, is available at the UNO Testing Center at frequent intervals.

READMISSION TO GRADUATE STUDIES

Anyone who has previously been enrolled as a graduate student at UNO, but who has not attended for two calendar years, must be readmitted to graduate studies before registering for classes. Students in Business, Communication, Psychology, and Social Work must obtain...
readmission approval from their department/area. All students seeking readmission must obtain approval by the Dean for Graduate Studies and Research. In order to be readmitted, the student must complete the Readmission Application form indicating the department/area to which they were last admitted; change of program and/or category of admission can be accomplished subsequent to readmission. Students are advised to complete the readmission process prior to registration.

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 in the "Graduate Class Schedule" which is available at the Office of the Registrar. No registration will be allowed after the registration times listed in the class schedule except for thesis or independent study hours.

ADMISSION TO CANDIDACY FOR THE DEGREE
Students are eligible to receive a graduate degree only if they have been formally admitted to candidacy for the degree and have satisfied all requirements. It is the students' responsibility to make application for admission to candidacy for the degree as soon as they are eligible to do so. Each application should provide evidence that the student is capable of graduate-level performance and should contain a coherent plan of study leading to the degree that conforms to all policies of the UNO Graduate Faculty and of the cognizant graduate department(s).

In order that a coherent plan of study be developed early in each graduate program, it is the policy of the UNO Graduate Faculty that the last 18 hours of the approved plan of study should be completed with courses taken at the University of Nebraska following admission to candidacy for the degree. In particular, no degree can be awarded in the same semester in which the student is admitted to candidacy for the degree.

Eligibility
Eligibility for admission to candidacy for the degree is established when all the following conditions are met:
- An official transcript showing the receipt of an appropriate baccalaureate degree is on file in the Office of Graduate Studies.
- The scores on all required aptitude or advanced knowledge tests are on file in the Office of Graduate Studies.
- A minimum of six hours of graduate courses to be included in the plan of study have been completed within the University of Nebraska.
- With no grade lower than a “C”, a “B” average has been earned on all completed course work included in the plan of study.
- Any “Incomplete” (“I”) or “No Report” (“NR”) grade received in a course (excluding thesis or special research projects) included in the plan of study has been removed prior to filing the application. In unusual circumstances, the cognizant Graduate Program Committee may recommend, in writing, to the Dean for Graduate Studies and Research that an application be approved, even though it contains one “I” grade in the plan of study.
- All additional requirements of the department/area have been met.

Procedures
An application form for admission to candidacy for the degree can be obtained from the adviser or from the Office of Graduate Studies. The form should be completed by the student, in consultation with the major (and minor) adviser. The program should be carefully and completely planned at this time. The application form should be signed by the student and then by the adviser(s), who should then submit the form to the department/area Graduate Program Committee. When the application has been approved by the Committee and all required department/area signatures obtained, the application should be forwarded to the Dean for Graduate Studies and Research for review and final decision.

When the student has been admitted to candidacy for the degree, written notification will be sent to the student and to the adviser.

Guidelines for Construction of a Plan of Study
Every plan of study should conform to all policies of the UNO Graduate Faculty and of the cognizant graduate department(s). The following general guidelines should aid students and advisers to construct a plan of study.
- At least one-half the hours of non-thesis course work on a plan of study should be in courses which are restricted to graduate students only (800 or 999).
- A plan of study for an Option I Master of Arts or Master of Science degree should have at least six hours of thesis and a minimum of 24 semester hours of non-thesis course work.
- Up to one-third of the course work 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 and Research. All other policies regarding graduate programs will apply.
- BSAD courses 8110, 8170 and 8180 may not be used on a plan of study.
- See the section entitled, "Transfer of Graduate Credit".
- Each plan should contain suitable alternatives in case certain courses cannot be included in the program.
- If there are any irregularities (such as a late filing of the application, courses which were not taken within the time limit for degrees, etc.) in the plan of study or application, a memo explaining these irregularities and stating the recommendation of the Graduate Program Committee should be attached to the application.
Changes in the approved plan can be made after the admission to candidacy has been approved; as long as the changes have the appropriate approvals. Requests for such changes can be made on a form available from the Office of Graduate Studies.

**THESIS OPTION**

A thesis provides an opportunity for the student to obtain first-hand experience in research methods under competent direction. Students in many degree programs may elect a thesis option. In other programs all students are required to write a thesis. The thesis must be assigned a total of six hours of graduate credit on the approved plan of study. The field project must be assigned a total of three hours of graduate credit on the approved plan of study.

For each student pursuing a thesis option, the Dean for Graduate Studies and Research appoints a supervisory committee. For information on the appointment of such committees, see the supervisory committee section in this Graduate Catalog. The supervisory committee should be appointed as early in the student's program as possible. The committee shall supervise all aspects of the thesis project and approve the final form of the thesis.

The thesis should be initiated no later than eight months 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 contained in the pamphlet, "Instructions for the Preparation of Theses, Thesis-Equivalent Projects, and Ed.S. Field Projects," a copy of which can be obtained in the Office of Graduate Studies.

The student must defend the thesis in an oral examination before the supervisory committee. The students should obtain a copy of the Graduate Degree Completion Report from the Office of Graduate Studies to take to the oral examination. When the final approved form of the thesis is complete, the supervisory committee must sign each copy of the form and each copy of the acceptance page for the thesis.

An abstract of no more than two pages in length and conforming to the thesis or thesis-equivalent project in respect to margins and spacing must be placed in the thesis or thesis-equivalent project following the acceptance page.

The student should then have the desired number of copies of the thesis made. Two copies, the original and one additional, are required for the Library. Students may wish to have additional copies for themselves, for the department and/or adviser, or for others. The cost of binding all copies is to be paid by the student before submitting the final copies of the thesis to the Office of Graduate Studies. The final copies with signatures of the supervisory committee members on the approval sheets of all copies must be submitted no later than 12 working days prior to the anticipated date of graduation.

**Guidelines for Establishing Thesis-Equivalent Projects**

Thesis-like projects should be of the same caliber of scholarly work as a thesis. The student will research, develop and analyze a topic approved by the Supervisory Committee. Departments desiring to use the thesis-equivalent category must apply to the Graduate Council for approval. The following guidelines are to insure that these projects are, so far as possible, equivalent to theses in scope, evaluation and process.

- The work on the project should commence at least eight months prior to the expected date of graduation.
- The project should be assigned a total of six hours of graduate credit on the approved plan of study.

The process for development and approval of the project must include all of the following:

- appointment of a supervisory committee;
- a proposal to be 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; and
- final approval by the supervisory committee.

The written product must satisfy the specifications to be found in the booklet, "Instruction for the Preparation of the Thesis, Thesis-Equivalent Project and Ed.S. Field Projects."

The approved written product will be submitted to the Office of Graduate Studies before the advertised deadline for theses, bound at the student's expense and deposited in the Library.

The final grade on the project will be either "Satisfactory" or "Unsatisfactory."

**FINAL COMPREHENSIVE EXAMINATIONS**

A final comprehensive examination is required of all candidates for the Master's degree. There are three exceptions to this rule where an alternative measure of mastery has been approved: the Master of Business Administration; Master of Professional Accounting; and the M.A. or M.S. with a major in Psychology, Educational Psychology or Industrial/Organizational Psychology.

The comprehensive examinations should be taken near the conclusion of the students' programs and should measure the students' knowledge and ability to synthesize that knowledge in the analysis of questions involving more than one concept. For those candidates not writing a thesis, the examination is a written one. For those candidates writing a thesis, the final comprehensive examination may be either written or oral at the option of the cognizant department/area. If the comprehensive is to be written, it will be arranged by the department/area Graduate Program Committee. If the comprehensive is to be oral, it should be arranged at the time of the oral examination over the thesis, at which time one-half of the examination may be devoted to the courses taken by the candidate and one-half to the thesis.
If the student has a defined minor, the minor adviser may require that the student take a comprehensive examination over the minor field. If such an examination is given, it should be given at a date arranged at the convenience of both the student and the minor adviser but falling within the limits established for all comprehensive examinations.

Most graduate departments require students to register for the comprehensive examinations at the time of their final enrollment; however, students should check with their advisers early in their programs to determine departmental policy concerning the administration of the final comprehensive examinations.

Results of comprehensive examinations must be submitted to the Office of Graduate Studies by the Graduate Program Committee no later than 12 working days before the anticipated date for the conferral of the degree.

CONFERRING OF DEGREES

Degrees are conferred at the regular commencement exercises in May, December and August. Only those students who have completed all procedures and requirements may participate in commencement exercises. Attendance at the commencement exercises when the degree is conferred is requested of all candidates. Appropriate academic costume must be worn.

The Graduate College will not approve any changes in the student's permanent record once the graduate degree is awarded.

QUALITY OF WORK STANDARDS

Graduate students are expected to do work of high caliber. Failure to do so will result in at least temporary dismissal from the degree program or from graduate standing. In particular, any one of the following will result in automatic dismissal from the degree program for those students with Unconditional or Provisional admission to a degree program:

- A grade of "C+" or below in any course involved in the first 12 hours of graduate study for provisionally admitted students;
- Failure to maintain a "B" average in all graduate work taken as part of the degree program;
- Receiving at least nine hours of graduate credit with the grade of "C" or "C+" in any courses taken in the student's major field of study or in any courses included in the plan of study, regardless of the average;
- Receiving a grade of "D+", "D", or "F" in any course taken in the student's major field of study or in any course included in the plan of study;
- Departments 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 or program unit may, under some circumstances, recommend dismissal of a student from a graduate program even though a 3.0 grade point average has 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;
- and failure to perform coursework qualifying examination or research at an acceptable level in the respective department or program unit.

Those departments that apply additional criteria of satisfactory performance beyond the requirements of the Graduate College shall conduct an annual review and evaluation of their students' progress in meeting degree requirements. Normally the graduate program committee of the department shall conduct this review in consultation with the student's adviser. However, the review may be done by other methods designated by the department.

A copy of the department's policy should be on file in the Graduate Office and a copy distributed to every graduate student enrolled in the program.

For students with Unclassified 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 should any of the above conditions occur.

A student who has been dismissed for failure to meet the Quality of Work standards may petition the cognizant Graduate Program Committee for any of the following:

- Unconditional reinstatement to the degree program (if appropriate);
- Reinstatement with Unclassified status in order to retake specific courses, with possible readmission to the degree program;
- Reinstatement with Unclassified status.

The recommendation of the Graduate Program Committee will be forwarded to the Dean for Graduate Studies and Research; only the Dean can actually readmit the student. The student will be informed by the Office of Graduate Studies of the Dean's decision on the reinstatement petition.

TRANSFER OF GRADUATE CREDIT

Approval of transfer of graduate credit for course work taken at another accredited university (including extension credit but not including correspondence courses) is made at the time of admission to candidacy for the degree. Grades received in courses for transfer of credit must be the equivalent of "B" or higher. Transfer of graduate credits from a course taken with a pass/fail option must be recommended by the cognizant Graduate Program Committee, supported by a written evaluation from the instructor and approved by the Dean for Graduate Studies and Research. 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.

Transfer of Credits Taken Outside the University of Nebraska

Up to one-third of the course work required for a graduate degree program may be accepted from an accredited institution other than a unit of the University of
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 for Graduate Studies before they can actually be transferred. UNO students who wish to take courses at the University of Nebraska-Lincoln or at the University of Nebraska Medical Center for transfer of credit should obtain an Intercampus Registration Form from the Office of Graduate Studies.

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.

INCOMPLETES

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 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. "Incomplete" should be given only 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. In most cases an "Incomplete" must be removed after one semester; check with the Office of Graduate Studies for details. "Incomplete" grades in thesis or research courses must be removed within two years of the date the "I" or "IP" was awarded. If the two year time limit expires, the student must enroll for the full number of outdated credits is granted by the Dean for Graduate Studies.

Accrual of Two or More Incompletes

Two or more "I" grades (excluding thesis or research courses) will result in a stop enrollment for any new courses; the stop enrollment will stay in effect until the record shows no more than one "I" grade.

"NR" (No Report)

An "NR" is given by the Registrar when a grade has not been submitted by the deadline. The "NR" must be changed to a grade after one semester, otherwise it is changed to "WX" (administrative withdrawal).

TIME LIMIT FOR GRADUATE DEGREES

The degree program (as defined in the plan of study) for a Master's and Ed.S. degrees must be completed within six consecutive calendar years. The first day of class of the earliest course which appears in the last 36 semester hours of the student's plan of study is the beginning of the student's graduate education. Coursework which would be taken between six and 10 years prior to completion of the degree program defined in the plan of study can be submitted for validation on an individual basis. Coursework which would be over 10 years old cannot be submitted for validation.

If students wish to use an outdated course (six to 10 years old) in a plan of study, they have two options available:

- retake the course; or
- obtain written permission to update the course from the department involved, the cognizant Graduate Program Committee and the Dean for Graduate Studies.

Updating can usually be done by taking a special examination or the current semester's final examination in the course. The grade of the examination must be filed with the Office of Graduate Studies and must be a grade of "B" or higher; otherwise, the student shall be required to retake the course or to substitute another course in the plan of study. In some graduate programs some special exceptions are made with approval of the Graduate Council. Consult with the Graduate Program Committee.
OTHER POLICIES
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 must 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.

Change of Graduate Degree Program
Students who wish to change their graduate degree programs should obtain the appropriate form from the Office of Graduate Studies; procedures are explained on the form. The decision as to whether students requesting a change will be accepted shall be left to the Graduate Program Committee of the department/area in which they are seeking admission and to the Dean for Graduate Studies and Research. Students who have two or more grades of "Incomplete" on their records are not eligible to change degree programs.

Course Loads for Graduate Students
Full-time graduate students at the University of Nebraska shall be defined as students enrolled for at least nine credit hours during an academic semester or at least three hours during a five-week summer session, irrespective of 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 and Research. In some programs special permission may be granted to take more than 12 hours as a regular load. Students should consult with the department for provisions.

Courses Offered for Graduate Credit
Courses which are available for graduate credit are those which have been approved by the UNO Graduate Faculty or its designee. All syllabi for courses approved for graduate credit are on file in the Office of Graduate Studies. 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.

A numbering system is used to indicate the availability and level of courses for graduate credit, as follows:
- 3---/8--5 (e.g., 3110/8115) or 4---/8--6

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. Some seniors, with special permission, may enroll for graduate credit in such courses; see "Admission to Graduate Studies at UNO - Special Permission to Register for Graduate Credit".

Courses with these numbers are open to graduate students only.

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 practice, 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" 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" level or higher. Approval of the request must be obtained from the Dean for Graduate Studies and Research before the request to drop is submitted to the Office of the Registrar.

Residency Requirements
All credit hours included in a plan of study leading to a graduate degree must be taken in residency at the University of Nebraska at Omaha, except as provision is made for transfer of credit.

Withdrawal from All Courses
To officially withdraw from all classes and thereby from the University, and to receive any refund due (as well as appropriate posted of academic standing for the grading period in question) graduate students are required to obtain the signatures of the adviser and the UNO Dean for Graduate Studies and Research prior to submitting the withdrawal form to the Office of the Registrar. Any refund of fees will be posted in the Cashier's Office and published in the class schedule. Failure to withdraw according to this procedure may cause forfeiture of refunds and inappropriate posting of grades.

GENERAL APPEAL PROCEDURES
FOR ACADEMIC MATTERS
Appeal of General Academic Matters Related to Student Programs
- 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 will be the final appeals body (for exceptions, see the last part of this section).
- 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.
- 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 for 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 for Graduate Studies on the campuses involved.

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 Committee III of the Executive Graduate Council. Committee III 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 Committee III not to accept jurisdiction of an appeal shall be final and is not subject to further appeal.

- Appeals to Committee III of the Executive Graduate Council must be made in writing and must specifically outline the grounds for appeal. Such appeal must be made within 20 working days of the day the decision of the campus council is received (working days shall not include those days the University is not in session).
- Committee III of 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 Committee 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 decision of Committee III of the Executive Graduate Council either to decide whether the case should be heard or to decide the merits of the case.

Appeal of Grades in Graduate-Level Courses

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. If the matter is not resolved, the student may file an appeal in writing to the campus Dean for 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 who shall forward the appeal to the student-faculty committee or council which is 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.

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.
Drs. James Thorson (left) and Arthur Diamond Jr. (right) are the 1990-91 recipients of the Distinguished Research or Creative Activity Award. Dr. Thorson is the Chair of the Department of Gerontology, an Isaacson Professor and a University of Nebraska Graduate Faculty Fellow. He is widely published and has presented papers throughout the United State and Canada. Dr. Diamond, an accomplished researcher in the field of economics, is the recipient of several research grants and has numerous articles published in scholarship journals. He combines teaching, research and creativity to provide his students with academic excellence.
BIOLOGY

PROFESSORS:
Bragg, deGraw, Egan, Hayhome, Lunt, Mosher, O’Dell, Stasiak, Sutherland

ASSOCIATE PROFESSORS:
Antlfinger, Engelmann, Fawcett, French, Galuso, Ingham, Sharpe, T. Weber

ASSISTANT PROFESSOR:
Chase, Nordahl, Tapprich

Degree Requirements

To enter a degree program with a major in biology, an applicant must normally present 24 semester hours of credit in the biological sciences including background in zoology, botany and genetics plus evidence of adequate preparation in the supporting sciences of inorganic and organic chemistry, physics and mathematics. Students with inadequate backgrounds may be admitted provisionally and will be required to make up deficiencies. The GRE (aptitude) is required and the scores must be submitted before a student will be admitted to the program.

In addition to the application for admission, transcripts, and GRE scores, the Biology Department also requires submission of three letters of recommendation and a personal statement of goals. Recommendation forms will be sent from the Biology Department upon receipt of the application for admission and transcripts.

Master of Arts

To complete the Master of Arts degree with a major in biology the candidate must present 30 credit hours of graduate coursework to include six credit hours of Thesis (8990), one credit hour of Graduate Seminar (8010), and at least 23 credit hours of appropriate courses to be determined by the student and the faculty advisory committee. At least eight of these 23 credit hours will be taken in 8000-level (graduate only) courses. Graduate students are expected to attend the Graduate Seminar (8010) even when not registered for it. The candidate must pass a final oral examination and present his/her thesis results at an open meeting of the faculty and students.

Master of Science

A student may become a candidate for this degree upon the recommendation of his/her advisory committee. The candidate for this degree must present 36 hours of graduate work, including one credit hour of Graduate Seminar (8010), two to six credit hours in Independent Research in Biology (8020), and other appropriate courses to be determined by the student and his/her graduate advisory committee. At least 18 credit hours of the total 36 credit hours required for the degree will be taken at the 8000-level (graduate only) courses. Graduate students are expected to attend the Graduate Seminar (8010) even when not registered for it. The candidate must pass a final written comprehensive examination.

Master of Public Administration - Environmental Option

The Biology Department cooperates with the Department of Public Administration in offering this degree. The degree is administered through Public Administration and is described under that department.

Course Descriptions

3220/8225 Microtechnique (3) A course in the techniques of fixation, dehydration, staining, clearing and mounting biological material in the manufacture of microscope slides. Prereq: Two years of biological sciences.

3340/8345 Ecology (4) Study of interrelationships between organisms and their biotic and abiotic environment; includes population biology, community dynamics, biotic interactions and evolution. Prereq: BIOL 1450 and 1750.


3630/8635 Plant Anatomy (3) A study of cells, tissues and organs of vascular plants with particular emphasis on internal structure of seed plants. Prereq: BIOL 1450-1750.

3750/8755 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 adaptations to the environment of the temperate North American grasslands. Prereq: BIOL 1750.

3740/8745 Histology (4) Analysis of the microscopic anatomy of tissues and organs, their adaptations and functional significance. Prereq: BIOL 1750, and a course in vertebrate anatomy, or permission of instructor.

4100/8100 Biogeography (3) This course is intended as an introduction to biogeography, the study of the distribution of organisms in space and time. Prereq: BIOL 1750, GEOG/GEOL 3100 or BIOL 3100, graduate.

4120/8120 Ecosystem Management (3) Directed study in the application and evaluation of methods used for managing native and re-established ecosystems. Up to three two- to three-day field trips may be scheduled. Prereq: Graduate in biology and permission of instructor. Recommended: BIOL 3340/8345.

4210/8146 Molecular Genetics (4) Examination of current topics in molecular genetics including DNA preparation and packaging, gene structure and regulation, and gene cloning methods and their application. Lecture, discussion and laboratory. Prereq: BIOL 2140 and 3020, or their equivalent.

4220/8220 Cellular Biology (4) This course is a comprehensive study of the structure and function of plant and animal cells. Prereq: BIOL 1450 and 1750, organic chemistry, or permission of instructor.

4250/8250 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. Prereq: BIOL 1450, 1750, and organic chemistry.

4210/8126 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. Includes two one-day weekend field exercises. Prereq: BIOL 3340, graduate in biology or permission of instructor.

4220/8226 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. Prereq: BIOL 2140 and 3340 or permission of instructor, junior-senior.

4230/8235 Organic Evolution (3) A study of organic evolution in terms of evidences which support the theory and the mechanisms involved in the process. Prereq: BIOL 2140. Lecture and discussion only.

4270/8276 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. Prereq: BIOL 1750 and PSYCH 1010 or permission of instructor. Lecture only. (Same as PSYCH 4270/8276)

34 BIOLOGY
4280/8286 Animal Behavior Laboratory (1) Laboratory and field studies of animal behavior with an ethological emphasis. Classical laboratory experiences and independent studies will be conducted. Prereq: BIOL/PSCYH 4270/8270 or concurrent enrollment.

4310/8316 Microcomputers in Biology (2) A lecture/demonstration survey of microcomputer applications in biology and biological education. Prereq: Three hours of a college-level computer course or written permission of instructor, graduate.

4320/8326 Microcomputers in Biology Laboratory (2) An individualized laboratory course in which the student will complete selected biocomputing projects. Prereq: BIOL 4310/8315 or concurrent enrollment or written permission of instructor, graduate.

4340/8346 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. Prereq: BIOL 1750.

4350/8356 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, chromatograms and modern herbarium techniques for lichens and other cryptogams. Prereq: BIOL 1450/1750 and permission of instructor, graduate in biology.

4370/8376 Physiology (2) A survey of the algae dealing with their ecology, morphology, physiology, taxonomy and evolution. Prereq: BIOL 1450/1750 or permission of instructor, graduate in biology.

4380/8386 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. Prereq: BIOL 1450/1750, graduate.

4390/8396 Vascular Plant Morphology (3) A survey of living and fossil vascular plants with emphasis on their comparative anatomy and morphology and their evolution. Prereq: BIOL 1450-1750 or equivalent, graduate in biology.

4430/8436 Mycology (3) A study of the fungi, including their morphology, taxonomy, growth, development and reproduction. Prereq: BIOL 1450-1750, graduate in biology.

4440/8446 Plant Physiology (4) A study of plant processes and functions with emphasis on photosynthesis, growth and development, metabolism and mineral nutrition. Prereq: BIOL 1450/1750, organic chemistry, or permission of instructor.

4450/8456 Microbial Bacteriology (4) Examination of physiological diversity found among microorganisms with an emphasis on experimental procedures and practical applications. Lecture and laboratory. Prereq: BIOL 3020.

4720/8725 Experimental Endocrinology (2) Laboratory studies of the functions of the endocrine system emphasizing experimental techniques and laboratory experience. Prereq: A course in endocrinology, concurrent registration in BIOL 8736, or permission of instructor.

4730/8736 Endocrinology (3) A survey of endocrine physiology stressing the regulatory and integrative roles of hormones, the control of hormone secretion and mechanisms of hormone action. Prereq: Organic chemistry vertebrate anatomy and physiology or permission of instructor.

4740/8746 Animal Physiology (4) A comprehensive study of animal function emphasizing mechanisms of regulation and control. Prereq: BIOL 1750, vertebrate anatomy, organic chemistry and physics, or permission of instructor.


4790/8796 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. Prereq: BIOL 4780 or 4950 or permission of instructor.

4810/8816 Herpetology (4) The biology of amphibians and reptiles, including their evolution, classification, anatomy, physiology, ecology, distribution and identification with emphasis on North American groups. Prereq: BIOL 1750.

4850/8856 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. Prereq: BIOL 1450, 1750, 3020 and junior-senior, or permission of instructor.

4860/8866 Invertebrate Zoology (4) A comprehensive study of the invertebrate animals. Prereq: BIOL 1750.

4910/8916 Protozoology (4) The biology of phylum Protosa, including their morphology, physiology, reproduction, genetics and ecology with emphasis on free-living groups. Prereq: BIOL 1750.

4920/8926 Parasitology (4) Taxonomy, morphology, physiology, life history, discrimination and control of the parasitic protozoa, helminths and arthropods. Prereq: BIOL 1750.

4940/8946 Entomology (4) The study of insects; their classification, morphology, physiology, behavior, life histories, ecology and evolution. Prereq: BIOL 1750.

4950/8956 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. Prereq: BIOL 1750.

4980/8986 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. Prereq: BIOL 1750.

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. Prereq: Graduate.

8020 Independent Research in Biology (1-3) Research work under supervision of a graduate faculty member. May be taken more than once for credit; up to 4 credits for M.A. degree candidates, up to 6 credits for M.S. degree candidates. Prereq: Graduate and written permission of graduate faculty supervisor.

8080 Advanced Topics in Biology (1-3) Lecture and/or laboratory courses for graduate students designed to provide exposure to biological specialties not offered in the regular curriculum. Prereq: Graduate and permission.

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. Prereq: Graduate and written permission of graduate faculty member.

8180 Biosystematics (3) A study of principles and techniques in animal and plant biosystematics. The course will focus on the species problem and upon the experimental investigation of the problem. Readings, discussions, laboratory, and a written report. Prereq: Graduate in biology and permission of instructor.

8190 Communities and Ecosystems (3) Advanced study of populations, communities and ecosystems; may require overnight trips. Prereq: BIOL 3340/8345, permission of instructor, graduate in biology.

8200 Plant Ecology (4) Advanced study of plant communities and individual plant species including relationships with the environment and vegetative dynamics. Emphasis on methods of evaluation and analysis. May require overnight field trips. Prereq: BIOL 3340/8345, permission of instructor, graduate in biology. Recommended: BIOL 3530/8535. Fall

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, including multivariate analysis. Statistical computer packages are used. Randomized, block, Latin-square and split-plot designs are introduced. Prereq: Stat 3000/8005 or equivalent, permission of instructor and graduate.

8330 Advanced Topics in General Physiology (3) Studies in general physiology including such topics as photo-physics, hormonal regulation of metabolic pathways, temperature-related phenomena, and cytogenetic physiology. Lecture, laboratory, and written report. Prereq: Graduate in biology.

8830 Environmental Physiology (3) A detailed study of selected dynamic environmental factors and mechanisms of physiologic adaptation by organisms of various taxa. Prereq: General physics, genetics, animal physiology, or permission of instructor, Graduate.

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. Prereq: Graduate and written permission of instructor.

8950 Thesis (1-6) An original and independent research project written under the supervision of a faculty thesis advisory committee.
Degree Requirements

Foundation courses: A student must have completed basic courses in the following areas either as an undergraduate student or concurrent with 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 2010 and 2020)

Statistics and Computers in Business. BSAD 8120 or an equivalent course in each at the undergraduate level (DSCI 2130 and 2310)

Quantitative Methods and Production/Operations Management. BSAD 8170 or an equivalent course in each at the undergraduate level (DSCI 2120 and 3500)

Management and Marketing Principles. BSAD 8130 or an equivalent course in each at the undergraduate level (MGMT 3490 and MKT 3310)

English Composition is a required foundation course for all foreign students admitted to the MBA 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 include the course deficiencies in the program of study. Students who consider themselves proficient through experience or self-study in any of these areas may complete a "Satisfaction by Exam" in lieu of coursework. Foundation courses including BSAD 8110, 8120, 8130, 8170 and 8180 may not be used on the 36 hour MBA plan of study.

Graduate Courses: the degree requires a minimum of 36 semester hours for completion.

Core Courses ........................................ 24
Electives ............................................. 12

A maximum of six hours of electives may be taken in an area outside the College of Business Administration, subject to advance approval by the Graduate Program Committee and the Director of Graduate Studies. The 12 hours of electives may include only three hours of dual-level (undergraduate/graduate) courses. A thesis or comprehensive examination is not required. Instead, the integrative course BSAD 8800 must be completed in the student's last nine hours of the degree program with a grade of "A" or "B." A student may elect to write a thesis in lieu of BSAD 8800.
### Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BSAD 8010</td>
<td>Legal Environment of Management</td>
<td>3</td>
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<tr>
<td>BSAD 8030</td>
<td>Business Information Systems</td>
<td>3</td>
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<tr>
<td>BSAD 8100</td>
<td>Managerial Economics</td>
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<tr>
<td>BSAD 8200</td>
<td>Managerial Accounting</td>
<td>3</td>
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<tr>
<td>(or an approved graduate-level accounting course, if applicable)</td>
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<tr>
<td>BSAD 8310</td>
<td>Human Behavior in Organizations</td>
<td>3</td>
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<tr>
<td>BSAD 8400</td>
<td>Marketing Policies</td>
<td>3</td>
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<td>BSAD 8500</td>
<td>Financial Management</td>
<td>3</td>
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<tr>
<td>BSAD 8800</td>
<td>Policy, Planning and Strategy</td>
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### Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BSAD 8000</td>
<td>Quantitative Analysis</td>
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<tr>
<td>BSAD 8020</td>
<td>Research Methods in Economics and Business</td>
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<tr>
<td>BSAD 8040</td>
<td>Applied Quantitative Analysis</td>
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<tr>
<td>BSAD 8050</td>
<td>Business Conditions Analysis</td>
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<tr>
<td>BSAD 8080</td>
<td>Business Forecasting</td>
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<tr>
<td>BSAD 8300</td>
<td>Organization Theory and Design</td>
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<tr>
<td>BSAD 8320</td>
<td>Personnel Administration</td>
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<tr>
<td>BSAD 8350</td>
<td>Seminar in Management</td>
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<tr>
<td>BSAD 8426</td>
<td>Business Demographics</td>
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<tr>
<td>BSAD 8450</td>
<td>Seminar in Marketing</td>
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<tr>
<td>BSAD 8510</td>
<td>Security Analysis</td>
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<tr>
<td>BSAD 8520</td>
<td>Seminar in Investment Management</td>
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<tr>
<td>BSAD 8530</td>
<td>Banking and Financial Markets</td>
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<td>BSAD 8550</td>
<td>Seminar in Finance</td>
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<tr>
<td>BSAD 8566</td>
<td>State and Local Finance</td>
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<tr>
<td>BSAD 8600</td>
<td>Real Estate and Land Use Theory</td>
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<tr>
<td>BSAD 8610</td>
<td>Current Problems in Real Estate</td>
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<td>BSAD 8710</td>
<td>Structured Software Design</td>
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<tr>
<td>BSAD 8720</td>
<td>Systems Analysis and Design</td>
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<td>BSAD 8730</td>
<td>Decision Support Systems</td>
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<td>BSAD 8740</td>
<td>Data Base Management</td>
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<td>BSAD 8770</td>
<td>Seminar in Management Information Systems</td>
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<tr>
<td>BSAD 8880</td>
<td>Arts and the Executive</td>
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<tr>
<td>BSAD 8900</td>
<td>Independent Research</td>
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<tr>
<td>BSAD 8990</td>
<td>Thesis</td>
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<td>ACCT 8016</td>
<td>Advanced Accounting*</td>
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<td>ACCT 8046</td>
<td>Federal Taxation*</td>
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<td></td>
<td>of Corporations and Partnerships*</td>
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<td>ACCT 8076</td>
<td>Accounting for Not-For-Profit Organizations*</td>
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<td>ACCT 8096</td>
<td>Advanced Auditing*</td>
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<td>ACCT 8210</td>
<td>Accounting Theory*</td>
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<tr>
<td>ACCT 8220</td>
<td>Federal Estate and Gift Taxation*</td>
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<td>ACCT 8230</td>
<td>Controllership*</td>
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<td>ACCT 8250</td>
<td>Seminar in Accounting*</td>
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<td>ACCT 8280</td>
<td>Tax Research and Planning</td>
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<tr>
<td>ACCT 8900</td>
<td>Independent Research*</td>
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<tr>
<td>ACCT 8910</td>
<td>Special Topics in Accounting*</td>
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<tr>
<td>ECON 8216</td>
<td>Industrial Organization</td>
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<tr>
<td>ECON 8266</td>
<td>History of Economic Thought†</td>
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<td>ECON 8306</td>
<td>Quantitative Applications in Economics and Business†</td>
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<td>ECON 8326</td>
<td>Natural Resource Economics†</td>
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<td>ECON 8456</td>
<td>Monetary Theory and Policy†</td>
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<tr>
<td>ECON 8616</td>
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<tr>
<td>ECON 8626</td>
<td>International Monetary Economics†</td>
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<td>ECON 8666</td>
<td>International Economic Development†</td>
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<td>ECON 8610</td>
<td>Seminar: Public Finance†</td>
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<td>ECON 8650</td>
<td>Economic Education†</td>
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<td>ECON 8660</td>
<td>Seminar in Labor Economics†</td>
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<tr>
<td>ECON 8670</td>
<td>Seminar in Money and Banking†</td>
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<td>ECON 8870</td>
<td>Seminar in Regional Economics†</td>
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<tr>
<td>ECON 8890</td>
<td>Seminar in Urban Economics†</td>
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<tr>
<td>*Accounting course descriptions listed in the accounting section.</td>
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<tr>
<td>†Economics course descriptions listed in the economics section.</td>
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</tbody>
</table>

### Student Responsibilities

Each student admitted to graduate studies is responsible for knowing the procedures and regulations of the Graduate Catalog.

Each student also should consult with the Director of the MBA program at least once each semester to assure continued progress toward the degree objective.

Students must maintain a 3.0 ("B") average to fulfill the program and graduation requirements. No more than two "C's" and/or two "C+'s in graduate courses are permitted.

### Executive Master of Business Administration Degree

The Executive MBA is designed for organization-sponsored, experienced, middle- and upper-level managers, professionals and individual business owners who aspire to even more responsible managerial assignments.

The curriculum has been established so that class members, as a group, will progress through a carefully structured sequence of courses over a two-year time period. Primary objectives of the program are to provide class members a broader perspective of many organizational issues, sharpen managerial skills and increase understanding of those political, social, international and economic forces that impact managerial effectiveness.

### Admissions Standards

Admission to the Executive MBA program is based on the following criteria:

- Undergraduate degree and grade point average
- GMAT score
- Minimum of six years of full-time work experience
- Scope of managerial experience
Degree Requirements
A student must complete the following courses:

**Required Courses**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD 8260</td>
<td>Accounting Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 8270</td>
<td>Contemporary Economics for Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 8280</td>
<td>Human Resources Management</td>
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<td>BSAD 8290</td>
<td>Marketing Management</td>
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<tr>
<td>BSAD 8380</td>
<td>Financial Management for Executives</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 8370</td>
<td>Legal and Ethical Considerations in Business</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 8390</td>
<td>Production Operations and Analysis</td>
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<td>BSAD 8390</td>
<td>Contemporary Accounting Systems</td>
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<tr>
<td>BSAD 8490</td>
<td>Management and Organization Theory</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 8470</td>
<td>Financial Analysis and Investments</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 8490</td>
<td>Economic Theory: Economics for Managerial Decisions</td>
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<td>BSAD 8490</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 8560</td>
<td>Marketing Strategies</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 8570</td>
<td>Administrative Policy and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 8580</td>
<td>International Business and Economics</td>
<td>3</td>
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<tr>
<td>BSAD 8590</td>
<td>Seminar in Business Administration</td>
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**Course Descriptions**

**Business Administration**


4040/8046 Advanced Income Tax Accounting (3) Analysis of the fundamental areas involved in the federal income taxation of corporations, corporate shareholders and partnerships. Prereq: ACCT 2020, within previous three years.

4070/8076 Accounting for Not-for-Profit Organizations (3) A study of the budgeting process, accounting techniques, reporting requirements and the financial operating characteristics of not-for-profit and governmental organizations. Prereq: ACCT 2020.

4090/8096 Advanced Auditing (3) A more intensive study of the basic concepts and principles covered in ACCT 4080, as well as the study of selected additional advanced auditing topics. Prereq: ACCT 4080.

4420/8426 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. Prereq: Graduate.

4500/8506 State and Local Finance (3) An inquiry into the facts, techniques, principles, theories, rules and policies shaping, directing, influencing and governing the spending, taxing, debt and utilities of scarce resources for state and local governments. Prereqs: 2010 and 2020 or BSAD 8160.

6000 Quantitative Analysis (3) The study of quantitative techniques and models and their application in business decision-making. Prereq: DSCI 2130 or BSAD 8170.

8010 Legal Environment of Management (3) To provide an understanding of the totality of the environment, both national and international, in which the business enterprise operates. Will examine the legal process for defining persons and their rights, and enforcing those rights (e.g., the principles and policies of Constitutional law, property, torts, contracts, business organization law and methods of dispute resolution). To analyze the character of the law, how it is promulgated and enforced and how it changes in response to societal forces. This course is required for all students who pursue a program of study leading to the professional degree in Master of Business Administration, and should be taken early in their course sequence (e.g., as part of the first 12 credit hours). Prereq: Admission to MBA Program.

8020 Research Methods in Economics and Business (3) A study of current research techniques in business and economics. The student will become familiar with these techniques through text material, journal studies and actual application. Prereq: DSCI 2130 or BSAD 8120.

8030 Business Information Systems (3) A study of how information technology can be used for competitive advantage. The course is designed to focus on the management of information technology to increase organizational effectiveness. This course is intended for all MBA students. Prereq: DSCI 2310 or BSAD 8120.

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. Prereq: BA 8000 and graduate.

8050 Business Conditions Analysis (3) This course is concerned with the statistical measurement and evaluation of general business conditions, and the adoption 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. Prereq: ECON 2020 or BSAD 8190.

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 application and therefore students will be required to develop forecasting models and test their performance as part of their course. Prereq: BSAD 8000 or ECON 8030 or permission of instructor.

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. Prereq: Graduate in Economics or in College of Business Administration, ECON 2020 or equivalent, and a course that includes a basic introduction to the main rules for differentiating functions.

8110 Survey of Accounting (3) The course is designed to introduce students to the fundamentals of accounting for organizations. Accounting information provides users both inside and outside an organization the basis for making decisions. Within an organization, typical decisions facilitated by accounting information are made in production, marketing, finance and personnel. Users outside the organization who use accounting information include stockholders, regulatory agencies, the courts and labor organizations. This course cannot be used in a plan of study. This course is for the graduate student who has not taken accounting principles at the undergraduate level.

8120 Statistics and Computers in Business (3) The intent of the course is to familiarize students with elementary concepts in statistical and computer methodologies. Emphasis is placed on multiplicity of applications to a wide variety of fields. This course is offered for students who have not received credit for DSCI 2130 and DSCI 2310. This course cannot be used in a plan of study. Prereq: Graduate, one year college mathematics.

8130 Foundations of Management and Marketing (3) A general survey of the field of management and marketing. This course covers the topics for further study for both management and marketing at the graduate level. This course is intended for students who seek the Master of Business Administration degree, but have not completed the undergraduate equivalent courses in management and marketing. This course cannot be used in a plan of study. Prereq: Admission to the MBA program, ACCT 2020 and ECON 2020.

8000 Quantitative Analysis (3) The study of quantitative techniques and models and their application in business decision-making. Prereq: DSCI 2130 or BSAD 8170.
8170 Quantitative Methods and Production/Operations Management (3) This course addresses the fundamental concepts of management science and production/operations management: Various mathematical algorithms and methodologies as well as numerous applications will be explored. A wide variety of techniques and concepts related to manufacturing and service operations will also be studied. This course cannot be used in a plan of study. This course is intended for students seeking the Master of Business Administration degree. Prereq: Graduate and one year of college mathematics.

8180 Analytical Foundations of Economics (3) To familiarize students with the basic economic theory and policy analysis (principles level) required to analyze economic data and to understand and apply economic models. Students with the equivalent of Managerial Accounting at the undergraduate level should enroll in an approved accounting course.

8210 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. (Same as ECON 8100).

8300 Organization Theory and Design (3) A study of theories and methodologies of organization theory and design, with emphasis on current research and structured development methodologies. Techniques for analyzing and modeling distributed and concurrent software products. Integration of process design and data design through assigned cases and/or projects. Prereq: DSCI 2310 or BSAD 8120.


8740 Data Base Management (3) A study of Data Base Management Systems. Emphasis on data model design, data administration, strategic data planning and application development. Prereq: DSCI 2310 or BSAD 8120.

8770 Seminar in Management Information Systems (3) Current issues, trends and problems in information processing are critically examined. This seminar focuses on such topics as information management data base management, software technology, hardware technology and fourth generation languages. Prereq: DSCI 2310 or BSAD 8120.

8780 Decision Support Systems (3) Current applications and practices in decision support systems applied to the solution of a variety of business problems. The course includes concepts and principles of management information systems, information requirements for decision-making, administration of information systems, simulation modeling for decision support system application project. Prereq: DSCI 2310 or BSAD 8120.

8790 Special Studies In Business (1-3; may be repeated up to 6) A series of special courses designed to focus on current major issues and developments in a specific area of business administration, scheduled as a workshop or seminar according to purpose. Prereq: Graduate in good standing and as indicated for special workshop or seminar.

8910 Thesis (1-6) A research project, under the supervision of a faculty thesis advisor 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 advisor and two other faculty members, one of whom must be from outside the program area. Prereq: Permission of graduate adviser.
Executive Master of Business Administration

8260 Accounting Theory and Practice (3) Only students who have been admitted to the Executive MBA program may take this course. The purpose of the course is to introduce students to the concepts of financial and managerial accounting. Financial accounting is used by organizations to report to stockholders, regulatory authorities and others on the assets and equities of the organization. Managerial accounting is designed to help organizations satisfy objectives of providing goods and services efficiently and effectively.

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.

8280 Human Resources Management (3) Only students who have been admitted to the Executive MBA program may take this course. The intent of this course is to familiarize graduate students with concepts and models related to human behavior in the organization. Emphasis is placed on multiplicity of applications to a wide variety of areas within organizational behavior.

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.

8300 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.

8310 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.

8320 Production Operations and Analysis (3) Only students who have been admitted to the Executive MBA program may take this course. This course addresses the fundamental concepts of management science and production/operations management. Various mathematical algorithms and methodologies as well as numerous applications will be explored. A wide variety of techniques and concepts related to manufacturing and service operations will also be studied.

8330 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 is used 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.

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.

8470 Financial Analysis and Investments (3) Only students who have been admitted to the Executive MBA program may take this course. Investment principles involved in building an investment portfolio of securities, and financial analysis of securities, and in learning the complexities of the securities markets.

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 analyze economic decisions and apply economic principles to business decisions.

8490 Management Information Systems (3) Only students who have been admitted to the Executive MBA program may take this course. An introduction to management information systems including transaction processing, decision support systems and office automation.

8500 Marketing Strategies (3) This course provides students with a comprehensive knowledge of marketing strategies in both domestic and international markets.

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 administrative 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 structure of the external environment. This course is integrative and introduces both the theory and practice that enables that integrative process.

8580 International Business and Economics (3) The nature, behavior and economic environment of international business is surveyed in this course. As a multidisciplinary course, international opportunities are examined as they are influenced by international trade, monetary economics, finance and management.

8590 Seminar in Business Administration (3) Only students who have been admitted to the Executive MBA program may take this course. The course examines very specifically the opportunities and difficulties of a domestic U.S. organization as it attempts to expand and extend its sphere of operation into the international arena. This is both a theory course as it demands an understanding of the premises upon which such an extension would be based as well as a pragmatic course that addresses an actual business situation. There will be a strong emphasis upon the collection and assimilation of primary data and information for decision purposes.
CIVIL ENGINEERING

PROFESSORS:
Benak, Tadros

ASSOCIATE PROFESSOR:
Keefer

ASSISTANT PROFESSORS:
Moussauri

Master of Science

This degree program is offered by the faculty of the University of Nebraska-Lincoln (UNL), Department of Civil Engineering, and is administered by the Graduate Faculty of UNL.

Graduate work in Civil Engineering is governed by the general requirements of the Graduate Faculty of UNL. Selection of the option and program are subject to approval of the student's adviser and the departmental Graduate Committee.

A student applying for admission should designate the primary area in which he/she wishes to study. Major work for the Master of Science degree may be selected from the areas of Structural, Hydraulic, Sanitary, Transportation and Water Resources Engineering. A minor area may be designated from any one of the related Civil Engineering areas or from other related departments. Other supporting courses will be selected from advanced or graduate courses having some relation to the major group.

Doctor of Philosophy Degree

Studies leading to a Ph.D. degree in Engineering are conducted under the engineering doctoral program which is described in the UNL Graduate Bulletin.
COMMUNICATION

PROFESSORS:
Bauer, Cowdin, Francke, Wanzenried
ASSOCIATE PROFESSORS:
Carlson, Johansen, Prisbell, Sherer, Williamson
ASSISTANT PROFESSORS:
Fus, Lipschultz

Master of Arts

Degree Requirements
The Communication Master's Program has admission requirements and procedures in addition to those applicable to Graduate Studies as a whole, and prospective students are strongly encouraged to contact the Department regarding these admission requirements and procedures.

Unconditional Admission. May be granted to a student whose record includes at least the following:
1. Certification of a Bachelor's degree from a regionally accredited institution;
2. Documentation (official transcript) of having earned at least (a) a 3.25 (re 4.0) grade point average in the undergraduate work in his/her proposed graduate major and minor, (b) either a 3.0 overall undergraduate average or a 3.25 average in the last half of the undergraduate credit hours; and
3. Inclusion of at least 15 undergraduate semester hours of appropriate courses in communication arts and sciences including sufficient advanced (upper division) preparation in the area of graduate concentration.

Provisional Admission. May be granted for reasons of experience, maturity or other circumstances to a student who has less than the grade point averages stipulated above - but in no case less than the provisional admission standards of the Graduate College, UNO. Applicants who have more than six semester hours of deficiencies will be advised to remove them before reapplying for any type of admission.

In every case of provisional admission [for any reason other than six or fewer semester hours of deficiencies], provisional admission will be recommended to the UNO Graduate Dean only after approval by at least two-thirds of the graduate faculty members in the Communication Department. If granted provisional admission with this special approval, the student must complete Communication 8470 or 8570 or 8010 during the first enrollment period when one of these three courses is offered and pass it with a grade of "B" or higher.

Before deciding whether or not to recommend provisional admission, the Department's graduate faculty may require any one or any combination of the following:
1. Completion of prescribed course(s) (not for graduate credit) with a grade of "B" or higher;
2. Two written or documented oral recommendations from persons who are in a position to evaluate the applicant's potential for graduate study; or
3. Passing such test(s) as these faculty members deem necessary in order to determine whether the applicant is adequately prepared for graduate study.

All students who major in Communication are required to complete the 12 semester hours of core courses prescribed by the Graduate Committee. These core courses provide a basic, intensive and broad coverage of communication as a field of advanced study, including foundations of both mass and transactional communication in conjunction with research and theory. The core courses are Communication 8010, 8470, 8570 and an elective theory or research seminar above the 8006 level.

The student's plan of study must be approved by the student's committee and may include provisions for a minor or area studies. Every plan of study must be designed to meet the requirements of either the thesis option or the non-thesis option.

Thesis option
Successful completion of 24 semester hours of coursework, plus a thesis (six credit hours) based on a proposal approved by the student's committee. No more than nine hours from outside the department may be counted toward requirements for the degree. The completed thesis is defended orally before the committee.

The student also takes a written comprehensive examination covering his or her major emphasis and minor or area studies.

Non-thesis option
Successful completion of 36 semester hours of coursework, at least 18 hours of which must be in courses open only to graduate students. No more than 12 hours from outside the department may be counted toward requirements for the degree. In lieu of thesis, an independent research or creative project, based on a proposal approved by the student's committee, may be formulated in writing, video or film; plus the student takes a written comprehensive examination covering his/her major emphasis and minor or area studies.

Course Descriptions

4010/8010 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. Prereq: Graduate and major/minor in Communication or permission of instructor.
4110/8115 Rhetorical Theory and Criticism (3) Rhetorical theory and criticism, emphasizing ways of evaluating oral communication. Prereq: Graduate, six hours of speech communication.
4140/8116 Theories of Interpersonal Communication (3) Surveys and evaluates various theories of interpersonal communication. Theories covered include but are not limited to interpersonal communication as symbolic interaction, rules theory, compliance gaining in interpersonal relationships, the pragmatic perspective, interpersonal communication as games, theories of relational development. Prereq: Graduate and major/minor in Communication or permission.
4170/8176 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. Prereq: Undergraduate major in Communication or permission.

4220/8226 Literary Journalism (3) Survey of the journalistic works of prominent American writers through readings, lectures, discussions, plus creative writing assignments.

4230/8236 Public Relations (3) A study of the principles, problems and techniques of the public relations function through lectures, discussions and case histories.

4240/8246 Public Relations Case Studies (3) Analysis, discussion and critique of actual public relations cases, involving problems relating to consumers, investors, employees, media and other publics. Prereq: JOUR 4230 or permission.

4310/8316 Political Broadcasting (3) A study of the evolving role of the electronic media in shaping political activities in our contemporary democratic society. Prereq: Three hours of journalism or broadcasting or political science or permission of instructor.

4340/8346 Broadcasting History and Regulation (3) A study of responsibilities and obligations of broadcasters as defined and interpreted through the history of regulation and deregulation policy. Licensing, spectrum allocation, programming and advertising regulation are studied.

4350/8356 Issues in Broadcasting (3) A study of current economic, legislative and sociological issues facing the American system of broadcasting.

4370/8376 Communication Workshop (3) A workshop to explore communication theory and processes and to develop skills in their application.

4380/8386 Film Theory and Criticism (3) Study of major trends in film criticism and theory in Europe and America, with concentrated analysis of selected films. Prereq: BRCT 2310 or DART 1000 or permission of instructor.

4400/8406 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.

4410/8416 Communications Law (3) A discussion of laws, court decisions, constitutional issues and their impact on 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.

4420/8426 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. Prereq: JOUR 4410, 2.0 GPA, ENGL 1160.

4500/8506 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.

4510/8516 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. Prereq: SPCJ 1010 or 1110 and three hours of psychology or sociology, or permission of instructor.

4520/8526 Psycholinguistics (3) A discussion of the literature concerned with how the psychological variables as perception, learning, memory and development relate to the linguistic variables of sentence structure, meaning and speech sounds. Prereq: Permission. (Same as PSYCH 4520/8526)

4530/8536 Seminar in Cross-Cultural Communication (3) This seminar will be directed towards understanding the components of cultural, subcultural, ethnic and racial misinterpretation, with the purpose of bringing to awareness those factors which disturb communication in cross-cultural, subcultural, ethnic and racial situations. Prereq: Admission to Graduate College.

4540/8546 Contemporary Systems of Communication (3) An adaptation of General Systems Theory to the study of human communication processes with emphasis on systems analysis of contemporary interpersonal communication perspectives. Prereq: Graduate and major in Communication, or permission.

4550/8556 Non-verbal Communication (3) A study of non-verbal communication in face-to-face, small group, speaker-audience and mass media settings. Reading, research and illustrations of non-verbal encoding and decoding.

4620/8626 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. Prereq: SPCH 1120 or permission.

4900/4910-8966/8916 Seminar in Mass Communication (3) A seminar in mass communication. Prereq: Undergraduate major in Communication or permission of instructor.

8101 Introduction to Research in Communication (3) Philosophy of scientific investigation, including process and products, in comparison to other ways of knowing; research methods, designs and procedures in communication studies; preparing a proposal; evaluating research reports; writing research reports. Prereq: Graduate and majoring in Communication or permission of instructor.

8202 Communication Research Methods (1) A variable content course dealing with research methods in communication. Each offering will treat a single research method in depth - survey, experimental, content analysis, qualitative, legal, etc. Prereq: COMM 6010 or permission.

8300 Seminar in Modern Public Address (3) Studies in figures, movements and institutions prominent in modern public address. Prereq: Graduate and majoring in Communication or permission of instructor.

8310 Seminar in Research in Communication (3) Study of current economic, legislative and sociological issues facing the American system of broadcasting.

8370 Seminar in Communication Workshop (3) A workshop to explore communication theory and processes and to develop skills in their application.

8380 Seminar in Film Theory and Criticism (3) Study of major trends in film criticism and theory in Europe and America, with concentrated analysis of selected films. Prereq: BRCT 2310 or DART 1000 or permission of instructor.

8390 Seminar in 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.

8410 Seminar in Communications Law (3) A discussion of laws, court decisions, constitutional issues and their impact on 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.

8420 Seminar in 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. Prereq: JOUR 4410, 2.0 GPA, ENGL 1160.

8500 Seminar in 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.

8510 Seminar in 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. Prereq: SPCJ 1010 or 1110 and three hours of psychology or sociology, or permission of instructor.

8520 Seminar in Psycholinguistics (3) A discussion of the literature concerned with how the psychological variables as perception, learning, memory and development relate to the linguistic variables of sentence structure, meaning and speech sounds. Prereq: Permission. (Same as PSYCH 4520/8526)

8530 Seminar in Cross-Cultural Communication (3) This seminar will be directed towards understanding the components of cultural, subcultural, ethnic and racial misinterpretation, with the purpose of bringing to awareness those factors which disturb communication in cross-cultural, subcultural, ethnic and racial situations. Prereq: Admission to Graduate College.

8540 Seminar in Contemporary Systems of Communication (3) An adaptation of General Systems Theory to the study of human communication processes with emphasis on systems analysis of contemporary interpersonal communication perspectives. Prereq: Graduate and major in Communication, or permission.

8550 Seminar in Non-verbal Communication (3) A study of non-verbal communication in face-to-face, small group, speaker-audience and mass media settings. Reading, research and illustrations of non-verbal encoding and decoding.

8620 Seminar in 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. Prereq: SPCH 1120 or permission.

8800-8889 Independent Research or Creative Projects (1-6) Non-thesis projects for majors in Communication supplementing advanced graduate courses. Prereq: Admitted to candidacy (or application pending), written proposal of each project approved by the student's committee.

8900 Thesis (1-6 each) Independent research project written under the supervision of an advisor.

9400 Seminar in Small Group Communication (3) Research and theory in the process of small group communication and leadership, research procedures, methods for developing skills in small group communication. Prereq: Communication 8010 or equivalent or basic statistics, or permission. (Same as SOC 9400)
COMPUTER SCIENCE

PROFESSORS:
Buchalter, Downing, Gessaman, Konuvalina, Maloney, Stephens, Wileman

ASSOCIATE PROFESSORS:
Heidel, Zhu

ASSISTANT PROFESSOR:
Ali, Chen, From, Liu

Master of Science
To obtain the Master of Science degree, the student must:
1. Earn a total of 36 acceptable credits, at least 24 of which must be in Computer Science.
2. Choose Computer Science courses with a number of 8000 or above and ending in the digit zero or six. At least 18 of these credit hours must be courses with a number ending in the digit zero, with at most six of these 18 hours from 8970, Independent Study.
3. Maintain a "B" average in all coursework with no grade lower than a "C" or "C+".
4. Up to 12 hours of graduate work may be taken in other areas related to Computer Science, such as Mathematics or Business, with the permission of the Graduate Program Committee. Such work may not count toward the 18 hours described in "2." above.
5. Pass a written comprehensive examination based on three related courses (one of which must have a number ending in a zero digit) which consists of two parts. The first part is a three-hour examination which may be open book. The second part is a one-week take-home examination.

Master of Arts
To obtain the Master of Arts degree in Computer Science the student must:
1. Earn a total of 30 acceptable credits.
2. Complete a thesis of six semester hours, which may be applied towards the 30 hours total.
3. Choose Computer Science courses with a number of 8000 or above and ending in the digit zero or six. At least 12 of these credit hours must be courses with a number ending in the digit zero, excluding CSCI 8970 and 8990.
4. Up to 12 hours of graduate work may be taken in other areas related to Computer Science, such as Mathematics or Business, with the permission of the Graduate Program Committee. Such work may not count toward the 18 hours described in "2." above.
5. Pass a comprehensive examination based on defense of the thesis.

Admission Requirements
Admission to a degree program in Computer Science is based on evidence of ability to successfully complete the requirements for the program.

For unconditional admission in Computer Science an applicant should:
1. have completed a Bachelor's degree with an overall average of 3.0 or better;
2. have completed coursework in Computer Science including the equivalent of CSCI 1610, 1620, 2610, 2620, 3320 (Introduction to Computer Science with Pascal, Computer Organization and Assembly Language Programming, Data Structures) and nine hours beyond Data Structures;
3. have adequate background in Mathematics for the courses to be taken;
4. students who have completed data structures will be eligible for admission in a provisional or unclassified status with a deficiency to be made up in addition to the above degree requirements.

Additional Degree Requirements in Computer Science
All graduate courses in Computer Science are divided into one of the eight categories or tracks listed below. One or more core courses (designated by an *) are specified for each track. To obtain a Masters Degree in Computer Science the student must:

1. Take at least one core course from at least five of the eight tracks.
2. Take at least three courses (nine credit hours) in any one of the eight tracks. Courses with a number ending in the digit zero do not count towards satisfying track requirements. Independent Study (CSCI 8970) may be used for up to three credit hours of this requirement.

Track 1 — Algorithms:
0. 8105 Applied Combinatorics
0. 8325 Data Structures
0. 8156 Graph Theory and Applications
1.* 8710 Design and Analysis of Algorithms
2. 8670 Algorithms Combinatorics
3. 8180 Algorithms Graph Theory
4. 8446 Introduction to Parallel Computing

Track 2 — Automata and Formal Languages:
0. 8226 Programming Languages
1.* 8666 Automata, Computability and Formal Languages
2.* 8706 Compiler Construction
3. 8680 Advanced Automata and Formal Languages

Track 3 — Operating Systems:
0. 8506 Operating Systems
1.* 8516 Advanced Topics in Operating Systems
2. 8520 Advanced Operating Systems Theory
3. 8556 Communications Networks
4. 8560 Advanced Communication Networks
### Computer Science

**Track 4 — Computer Architecture:**

- 0. 8506 Computer Architecture
- 1. 8750 Advanced Computer Architecture
- 2. 8626 Computer Graphics
- 3. 8760 Introduction to VLSI Design
- 4. 8770 Fault Tolerant Systems

**Track 5 — Artificial Intelligence:**

- 1. 8456 Introduction to Artificial Intelligence
- 2. 8460 Expert Systems
- 3. 8470 Topics in Artificial Intelligence

**Track 6 — Software Engineering:**

- 1. 8836 Software Engineering
- 2. 8840 Software Engineering II
- 3. 8860 Advanced Topics in Software Engineering

**Track 7 — Data Base:**

- 1. 8856 Introduction to Data Base Management Systems
- 2. 8860 Data Base Management Systems II
- 3. 8870 Topics in Data Base Management Systems

**Track 8 — Numerical Methods:**

- 0. 8305 Numerical Methods
- 1. 8306 Linear Programming
- 2. 8766 Stochastic Modelling
- 3. 8810 Advanced Numerical Methods I
- 4. 8820 Advanced Numerical Methods II
- 5. 8910 Advanced Topics in Optimization

### Financial Support

The Mathematics and Computer Science Department annually awards eight graduate assistantships. These positions pay an annual stipend of approximately $6300 plus waiver of tuition. The Mathematics assistantships require 20 hours per week work in the Mathematics laboratory during the fall and spring semesters. The Computer Science assistantships require 20 hours per week work under the supervision of a Computer Science faculty member.

International students must be in residence at UNO for at least one semester before being eligible for a teaching assistantship. This is to ensure satisfactory verbal skills in English.

### Course Descriptions

#### Computer Science

**3100/8105 Applied Combinatorics (3)** Basic Counting Methods, generating functions, recurrence relations, principle of inclusion-exclusion, Polya's Theorem. Elements of graph theory, trees and searching, network algorithms. Prereq: MATH/CSCI 2030. (Same as MATH 3100/8105)

**3300/8300 Numerical Methods (3)** Solving equations and systems of equations, interpolation, numerical differentiation and integration, numerical solutions to ordinary differential equations, numerical calculations of eigenvalues and eigenvectors, analysis of algorithms and errors, computational efficiency. Prereq: MATH 1950, MATH/CSCI 2050. Recommended: MATH 3350. (Same as MATH 3300)

**3220/8225 Data Structures (3)** Methods of representing arrays, stacks, queues, files, trees, graphs and files, searching and sorting. Prerequisite: CSIC 3200/8200 or CSIC 1620 or 1820.

**4150/8156 Graph Theory and Applications (3)** Introduction to graph theory. Representations of graphs and graph isomorphism. Trees as a special case of graphs. Connectivity, covering, matching and coloring in graphs. Directed graphs and planar graphs. Applications of graph theory in several fields such as network, social sciences, VLSI, chemistry and parallel processing. Prereq: CSIC/MATH 2050 or permission of instructor. (Same as MATH 4150/8156)

**4220/8222 Programming Languages (3)** Definition of programming languages. Global properties of algorithmic languages including scope of declaration, storage allocation, grouping of statements, binding time. Subroutines, coroutines and tasks. Comparison of several languages. Prereq: CSIC 2620, 3320/8325.

**4300/8305 Linear Programming (3)** Convex sets, hyperplanes, polytopes, mathematical modeling, formulation and geometry of linear programming. Primal simplex method, dual simplex method, revised simplex method, sensitivity analysis and problem-solving using computer packages. Prereq: MATH/CSCI 2050. (Same as MATH 4300/8305)

**4310/8316 Discrete Optimization (3)** The mathematical foundations and solution algorithms of discrete optimization problems including transportation problems, assignment problems and network problems. Prereq: MATH/CSCI 2050, 4300/8305. (Same as MATH 4310/8316)

**4350/8355 Computer Architecture (3)** Basic digital circuits, Boolean algebra, combinational logic, data representation and digital arithmetic. Digital storage and processing, control functions, input/output facilities, system organization and reliability. Description and simulation techniques. Features needed for multiprocessing, multiprogramming and real-time systems. Prereq: CSIC 2620 and 3320.


**4500/8505 Operating Systems (3)** Operating System principles. The operating system as a resource manager; device programming, interrupt processing and machine architecture as it relates to resource management; memory management techniques for uni/multiprogrammed systems; process description and implementation; processor management (scheduling); device management and file systems. Operating system implementation for large and small machines. Prereq: CSIC 2620, 3320, MATH 1950. Recommended: CSIC 4350.

**4550/8556 Communicating Networks (3)** Introduction to digital and analog data communication hardware, software and applications. Existing technologies and physical hardware for local and wide area networks. Transmission links, topological design, network protocols, addressing, routing and flow control. The ISO Open Systems Interconnection model. Prereq: CSIC 3320/8325.

**4620/8628 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. Prereq: MATH 2050 and CSCI 3320/8325.

**4650/8656 Automata, Computability and Formal Languages (3)** This course presents a sampling of several important areas of theoretical computer science. Definition of formal models of computation and important properties of such models, including finite automata and turing machines. Definition and important properties of formal grammars and their languages. Introduction to the formal theories of computability and complexity. Prereq: MATH/CSCI 2300. Recommended: CSCI 3320. (Same as MATH 4650/8656)

**4760/8766 Stochastic Modelling (3)** Examination and construction of various probabilistic models including Markov chains, Poisson Processes, renewal theory and queueing systems. Prereq: MATH 3740/8745. (Same as MATH 4766)

**4830/8838 Software Engineering (3)** Basic concepts and major issues of software engineering, current tools and techniques providing a basis for analyzing, designing, developing, maintaining and evaluating the system. Technical, administrative and operating issues. Privacy, security and legal issues. Prereq: CSCI 3320/8325.
4850/8856 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. Prereq: CSCI 3320/8325.
8160 Algorithmic Graph Theory (3) Review of the basic concepts of graph 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. Prereq: CSCI 3320/8325 and MATH 4150/8156 or permission of instructor. (Same as MATH 8160)
8460 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. Prereq: CSCI 4450/8456 or equivalent.
8470 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. Prereq: CSCI 4450/8456 or equivalent.
8520 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. Prereq: CSCI 4500/8506. Recommended: CSCI 4510/8516.
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. Prereq: CSCI 3220/8226 or equivalent.
8560 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. Prereq: CSCI 4550/8556 or equivalent.
8700 Algorithmic Combinatorics (3) Classical combinatorial analysis graph theory, trees, network flow, matching theory, extremal problems, block design. Prereq: MATH/CSCI 3100/8105. (Same as MATH 8670)
8860 Advanced Automata and Formal Languages (3) A continuation of MATH/CSCI 4660/8660. 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. MATH/CSCI 4660/8666. (Same as MATH 8980)
8710 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. Prereq: CSCI 3320/8325 or equivalent. (Same as MATH 8710)
8750 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. Prereq: CSCI 4350, 4500 and graduate.
8810 Advanced Numerical Methods I (3) Error Propagation, solutions of linear equations by various schemes. Minimization and conditioning, computation of eigenvalues and eigenvectors. Additional topics such as non-linear systems, least squares problems, etc. Prereq: MATH/CSCI 3300/8305. (Same as MATH 8810)
8820 Advanced Numerical Methods II (3) Interpolation and approximation, power series and economization, iterative factoring of polynomials, solution of non-linear equations, solutions of ordinary and partial differential equations, and gradient vector techniques. Prereq: MATH/CSCI 8810 and MATH 1970. (Same as MATH 8820)
8890 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. Prereq: CSCI 4850/8856 or equivalent.
8870 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. Prereq: CSCI 4850/8856 or equivalent.
8910 Advanced Topics In Optimization (3) Topics selected from dynamic programming, multi-objective optimization, optimization in vector spaces, optimal management in bioeconomics, and optimal control. May be repeated for credit with the permission of graduate adviser and instructor. Prereq: MATH/CSCI 4300/8306 or 4310/8316 and MATH 3230/8235 or permission of instructor. (Same as MATH 8910)
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. Prereq: Permission of Instructor; will vary with offering.
8970 Independent Studies (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. Prereq: Permission of instructor and graduate classification.
8990 Graduate Seminar (1-3) A graduate seminar in computer science.
COUNSELING

PROFESSORS:
Blake, Butler, Oleson, Pilkington
ASSOCIATE PROFESSORS:
Bertinetti, Harrington
ASSISTANT PROFESSOR:
Davis

Admission and Retention
The Counseling Program has admission requirements and procedures in addition to those applicable to Graduate Studies as a whole, and prospective students are strongly encouraged to contact the Department regarding these admission requirements and procedures. One such exception from the general Graduate Studies procedures are different admission deadlines for Counseling.

Students are admitted to the programs in Counseling twice each year. Applications should be submitted to the Office of Admissions by October 31, 1991 for admission to the spring semester, and by March 30, 1992 for summer or fall semesters of 1992.

Admission to a degree program in Counseling involves tests, references and interviews which require several weeks to complete. Students are admitted and permitted to continue programs in Counseling on the basis of their potential for successful training and professional practice.

Major points where students are evaluated with respect to their suitability for continuation in the program are:
1. when they are admitted to candidacy; and
2. prior to taking the Counseling Practicum or Internship courses.

Specific course and grade requirements for admission to candidacy and for permission to take Practicum courses are available in the Counseling Department office.

Programs
Students obtain a Master's degree in Counseling with an area of specialization. Current specialty areas include Elementary School Counseling, Secondary School Counseling (both of which require current teaching certificates for endorsement as a counselor in Nebraska or Iowa), Agency Counseling, College Student Personnel Services, and Counseling in Gerontology.

Successful completion of Counseling Practicum or Internship is a requirement for graduation. Graduates are recommended only for positions consistent with the program they completed.

Undergraduate students interested in non-school counseling, (Agency, Gerontology and College Student Personnel Work) are advised to examine the recommended pre-counseling program described in the Arts and Sciences section of the Undergraduate Catalog.

Master of Arts
Programs for the Master of Arts degree with a major in counseling will be determined upon request. The M.A. degree includes a thesis in lieu of a written comprehensive examination. Students who anticipate work on a doctorate are particularly encouraged to consider the M.A. degree.

Master of Science
Programs of study for the Master of Science degree are determined in relation to the student's previous coursework, experience and anticipated work setting. Most programs, however, will closely approximate the outlines given below. At least one research course is required of all students. A Master's degree in Counseling may not be completed in less than two years of study.

Specialization in Agency Counseling

Foundation Courses

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<th>Hours</th>
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<tr>
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<td>TED 8010 Introduction to Research</td>
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<td>Psychology coursework</td>
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Counseling Courses

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<td>COUN 8370 Group Theory and Practice</td>
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<td>COUN 8500 Counseling Techniques I</td>
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<td>COUN 8310 Counseling Techniques II</td>
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<td>COUN 8400 Counseling Techniques III</td>
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Agency Counseling Courses

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<td>COUN 8520 Consulting with Multicultural and Diverse Populations</td>
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<td>COUN 8610 Introduction to Marital and Family Therapy</td>
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Practicum/Internship Experiences | 9

Minimum Total Hours: 48

Master of Science
Specialization in Secondary Counseling

Foundation Course

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Elective | 6-8
### Master of Science in Counseling

**Specialization in Elementary Counseling**

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<td>Psychology coursework</td>
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**Counseling Courses**

- COUN 8020 Introduction to Counseling: 1
- COUN 8030 Counseling Practices: 2-3
- COUN 8040 Professional and Ethical Issues: 2
- COUN 8100 Research Project: 2-3
- COUN 8200 Counseling Theories: 3
- COUN 8230 Appraisal Techniques: 3
- COUN 8270 Group Techniques in Guidance: 1
- COUN 8300 Counseling Techniques I: 1
- COUN 8310 Counseling Techniques II: 1
- COUN 8400 Counseling Techniques III: 1
- COUN 8520 Consulting with Multicultural and Diverse Populations: 3
- Additional Elementary Counseling Courses: 15
- Practicum/Internship Experiences: 6-10

**Minimum Total Hours:** 48-52

### Master of Science in College Student Personnel Work

**Foundation Course**

- TED 8010 Introduction to Research: 3

**Counseling Courses**

- COUN 8030 Counseling Practices: 2-3
- COUN 8040 Professional and Ethical Issues: 2
- COUN 8150 The Student and Personal Work in Higher Education: 3
- COUN 8200 Counseling Theories: 3
- COUN 8230 Appraisal Techniques: 3
- COUN 8270 Group Techniques in Guidance: 3
- COUN 8300 Counseling Techniques I: 1
- COUN 8310 Counseling Techniques II: 1
- COUN 8400 Counseling Techniques III: 1
- COUN 8450 College Student Personnel Internship: 6
- COUN 8520 Consulting with Multicultural and Diverse Populations: 3

**Selected Cognate Courses:** 9-15

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.

**Minimum Total Hours:** 41-47

### Master of Science in Counseling with Specialization in Gerontology

The Counseling Degree Program with specialization in Gerontology is a cooperative effort of the Counseling Department and the Gerontology Program. The UNO Gerontology Program offers courses leading to a Certificate in Gerontology. Students wishing to earn a degree in Counseling with Specialization in Gerontology must be admitted to the Gerontology Certificate Program as well as the Counseling Program. Certificates of Specialization in Gerontology are issued by the University to those completing the Certificate Program upon the recommendation of the Gerontology Program.

**Foundation Course**

- TED 8010 Introduction to Research: 3

**Counseling Courses**

- COUN 8020 Introduction to Counseling: 1
- COUN 8030 Counseling Practices: 2-3
- COUN 8040 Professional and Ethical Issues: 2
- COUN 8200 Counseling Theories: 3
- COUN 8226 Career Development and Lifestyle: 3
- COUN 8230 Appraisal Techniques: 3
- COUN 8270 Group Techniques in Guidance: 1
- COUN 8300 Counseling Techniques I: 1
- COUN 8310 Counseling Techniques II: 1
- COUN 8370 Group Theory and Practice: 2
- COUN 8400 Counseling Techniques III: 1

**Additional Courses:** 0-3

These courses in Counseling are selected with the adviser on the basis of the student’s background and interests.

**Gerontology:** 9-15

Fifteen graduate hours in gerontology are required except in some instances where a student 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

Practicum and Internship are arranged in cooperation with the Gerontology Program to meet both the Counseling Department and the Gerontology Program requirements for practical and field experience.

**Minimum Total Hours:** 45-51
Course Descriptions

4010/8016 Child Abuse/Neglect: What You Can Do (3). This course is designed to acquaint students in the profession of teaching or school counseling with the specifics relevant to how people make vocational choices. Prereq: For 4220, junior or senior.

4220/8226 Career Development and Lifestyle (3). This course is designed to acquaint students in the profession of teaching or school counseling with the specifics relevant to how people make vocational choices. Prereq: For 4220, junior or senior.

4650/8656 Career Development for the Handicapped (3). Curriculum oriented for teachers and related professionals to work with the career development of handicapped individuals. Includes Information for elementary through adulthood with emphasis on intermediate and junior high school levels. Prereq: COUN 8020 or permission. (Same as SPED 4650/8656)

4750/8756 Mid-life, Career Change, Pre-Retirement Planning (3). This course is designed to involve students in the exploration of the developmental tasks of mid-life, myths and realities related to career change as well as the implication of pre-retirement planning. Factual information, as well as model examination and evaluation are presented to aid the student 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. Prereq: Junior, permission of instructor.

4790/8796 Practical and Experiential Training in Counseling (2-6). An integrative course designed to acquaint students and practitioners with social skills and social development in the counseling profession. This course is repeatable up to a maximum of six hours of credit each time the conditions of this syllabus are met. Prereq: Permission of instructor.

4800/8806 Guidance Skills for Educators (3). Course designed to familiarize educators with guidance activities of schools, the educator's role in these activities, and to develop appropriate guidance and listening skills. No credit for guidance majors. Prereq: Senior or graduate. (Same as TED 8806)

4804/8846 Women's Issues in Mental Health (3). This course is designed to acquaint students in Counseling and Social Work with psychological theories and research relevant to women and to explore the implications of this research for diagnosis, treatment and prevention of their mental health problems. Prereq: None.

4980/8986 Counseling Skills in Gerontology (3). This course is intended to help develop basic counseling skills for application in gerontology.

8000 Special Studies in Counseling and Guidance (1-6). Intensive courses scheduled as regular seminars or workshops, according to purpose. Prereq: Permission of department.

8010 Teaching Models in Affective Education (3). A study of models of teaching in the effective areas of education; a variety of models will be explored with special emphasis on planning and implementing activities in classroom situations. Prereq: TED 4500 or SPED 4580 or permission of instructor.

8020 Introduction to Counseling (1) Introductory course for students majoring in Counseling. Selected issues underlying the Counseling profession are studied. Prereq: Admission to Graduate College and Counseling Department.

8030 Counseling Practices (2). This is a pre-practicum course for Counseling majors. Course is designed to develop basic counseling skills. Prereq: COUN 8020 or permission.

8040 Professional and Ethical Issues for Professional Counselors (2). 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. Prereq: Graduate and admission into the Counseling program.

6100 Research Project in Counseling and Guidance (1-3). Individual or group study and analysis of specific problems/issues in the field. Prereq: Permission of instructor.

6120 Counseling With Parents (3). A course emphasizing techniques used in working with families. Prereq: COUN 8250 or COUN 8320 or permission of Instructor.

6150 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. Prereq: TED 8010.

6190 Research Project in Counseling and Guidance (2-5). Research study on a problem in the area of guidance and counseling. Prereq: Permission of instructor.

6200 Counseling Theories (3). Study of selected counseling theories. Prereq: Counseling majors or permission.


6220 Counseling Practicum (1) Supervised experiential training in counseling. Prereq: COUN 8300, COUN 8310, COUN 8400 or permission and a grade of "B" or higher in COUN 6000.

6230 Appraisal Techniques in Counseling and Guidance (3). Appraisal Techniques in Counseling and Guidance discusses the history of individual appraisal, the major technical considerations governing assessment and a survey of measurement devices in the cognitive and affective domains. The course will include use and implications of non-standardized assessment devices. Additionally, this course will cover the responsible use and interpretation of ability, aptitude, interest, personality and career development measures. Prereq: COUN 8000 or COUN 8150, and TED 8010.

6240 Counseling Practicum (3). An analysis of the theories and practices of counseling. Prereq: COUN 8200, COUN 8230.

6250 Advanced Counseling Practicum (3-4). Continuation of COUN 8220. Prereq: COUN 8220.

6290 Internship (3-6). Field experience in an approved guidance program under the supervision of a qualified counselor and a guidance professor of the university. Prereq: COUN 8250 with a grade of "B" or higher.

6270 Group Techniques in Guidance (1 or 3). Lecture and formal presentation of issues involving the group process in counseling (1 hour); it may also involve laboratory component stressing the experiential and application of aspects of the group process (3 hours). Students with a departmentally approved group experience take the course for one hour credit. All other students must take the class for three hours credit. Prereq: Admission to graduate program in Counseling or permission of instructor.

6280 Counseling Older Adults and Their Families (1). A study of issues related to the counseling of older adults and their families. Prereq: COUN 8240 or permission of instructor. (Same as GER 8280)

6290 Community Involvement for Urban Counselors (3). This course offers a wide range of experiences dealing with the ecology of the urban disadvantaged and its effects upon counseling and analysis of the various types of community counseling agencies that provide this service to disadvantaged individuals as well as those who are not disadvantaged. Prereq: Graduate.

6300 Counseling Techniques I (1). Study of counseling process and techniques emphasizing the Adlerian Counselor approach; beginning skills development in the use of these techniques. Prereq: COUN 8220.

6310 Counseling Techniques II (1). Study of counseling process and techniques emphasizing Rational Emotive Therapy and other cognitive approaches to begin skill development in the use of these techniques. Prereq: COUN 8220.

6330 Elementary School Counseling Practicum (4). Counseling in the elementary setting under the supervision of a counseling professor of the university. Prereq: COUN 8320 or permission of instructor.

6350 Elementary Counseling Internship (6). Field experience in an elementary counseling program under the supervision of a counseling professor and appropriate in-school personnel. Prereq: COUN 8320 and permission of department.
8570 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. Prereq: COUN 8030, 8200, and 8270.

8540 Counseling Techniques III (1) This course is intended to assist students in developing more systematic integration of previously learned information and skills and the application of those to specific counseling situations. A prerequisite for Counseling Practicum. Prereq: COUN 8300, 8310.

8420 Vocational Counseling (3) This course is designed to provide agency counselors with both practical and professional skills in the area of vocational counseling and decision-making. Prereq: Agency Counseling major or permission.

8450 College Student Personnel Internship (2-6) This course is designed to provide practical work experience under supervision in various areas within student personnel services. Prereq: Permission of instructor.

8470 Practicum in Group Counseling (4) Supervised experience co-facilitating group counseling at an approved practicum site. Required as the third course for the cognate area of group work in counseling. Prereq: COUN 8030, 8200, 8270, 8370 or permission.

8500 Counseling and Consulting for Special Concerns I (3) The study of issues pertaining to the provision of counseling and consulting services for specific human maladies including stress, personal abuse, substance abuse and crisis intervention strategies appropriate to these conditions. Prereq: COUN 8020 and 8200 or permission for graduate students in other human services disciplines.

8510 Alcoholism Treatment Modalities (3) An examination of alcoholism treatment modalities. Special attention is given to comparison with regard to theoretical perspectives, techniques and effectiveness. Prereq: Gradate in counseling, guidance, social work or psychology. Graduate students in other disciplines with prior training or experience in counseling will be admitted with permission of instructor.

8520 Counseling Multicultural and Diverse Populations (3) The study of issues pertaining to counseling persons from multicultural and diverse backgrounds. Prereq: COUN 8200 and 8300.

8600 Parent-Staff Development and Consultation (3) The study of information, research, consultation and programs for the development of effective parenting skills and effect school staff interaction skills. Prereq: Permission of instructor.

8610 Introduction to Marital and Family Therapy (3) This course is designed to acquaint students in the Human Services field with basic marriage and family counseling theory and techniques. Prereq: Admission to counseling or other graduate program; graduate or permission of instructor.

8520 Survey of Issues in School Counseling (3) This course is to provide school counselors with information on topics that are current and relevant. It will allow students 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. Prereq: COUN 8920, 8930 and 8210.

8710 Elementary Classroom Group Guidance and Career Development (3) The study of the systems approach for classroom group guidance and career development in the elementary school. Prereq: Admission to graduate study in counseling or another graduate education department.

8720 Individual Counseling with Children and Consultation (3) The study of individual counseling with children and consultation with parents and professionals. Prereq: Admission to graduate study in counseling and COUN 8030, 8400 or permission.

8730 Organization and Administration of Elementary Counseling Programs (3) The study of organization and administration of Elementary Guidance and Counseling programs. Prereq: Admission to graduate study in counseling or other graduate study in Education Department.

8750 Elementary Counseling Groups and Enrichment Programs (3) The study of small group counseling and enrichment programs in the elementary school. Prereq: Admission to graduate study in counseling: COUN 8030, 8270, 8300, 8310, 8400; or permission.

8910 Guiding Gifted Students (3) A course designed to increase teacher awareness of the social and emotional needs of gifted students. Teachers will also develop skills that will assist gifted students in meeting these developmental challenges. Prereq: Admission to graduate study. (Same as TED 8910)

8950 Directed Readings in Counseling and Gerontology (1-3) A study of recent and current literature on counseling with older people. Prereq: Counseling major and COUN/GER 8988 or permission of instructor.

8990 Thesis (1-6) To develop the student's ability to carry out accepted procedures associated with the research process. Prereq: Permission of instructor/committee chairperson.

9200 Independent Study In Counseling Theories and Techniques (1-3) Guided study of counseling theory and techniques under supervision of faculty member. Prereq: COUN 8200 or permission of instructor.
CRIMINAL JUSTICE

PROFESSORS:
Eskridge, Marshall, Secret, Spohn, Wakefield, Walker, Webb

ASSOCIATE PROFESSORS:
Clayton, Hoffman, Holbert, Horney, Kenney, Porter

Degree Programs
The Criminal Justice Department offers the student a choice of either a Master of Science or a Master of Arts Degree in Criminal Justice. Both degree programs emphasize criminal justice research, theory, planning and administration.

Admission Requirements
All candidates for the Criminal Justice Graduate Program must have a minimum of 18 semester hours of Criminal Justice or related courses which represent the core undergraduate curriculum. In addition, all candidates must have completed a basic statistics course, a research methods course, and a minimum of 15 hours in the social science area at the undergraduate level. Those students lacking these requirements will be required to make up these deficiencies during the first year of graduate work.

Master of Arts
The Master of Arts degree is a 30-credit hour program designed to emphasize research activity and independent inquiry, while simultaneously providing fundamental coursework. This degree is especially recommended for those students seeking an interim degree prior to obtaining the Ph.D.

To earn the Master of Arts degree in Criminal Justice, the student must satisfactorily complete the following course requirements:

Required Core Courses
- 8000 Professions in Criminal Justice
- 8010 The Nature of Crime
- 8020 Seminar in Administration of Justice
- 8030 Criminal Justice Research Theory and Methodology

Elective Criminal Justice Courses
Student selects five courses with adviser approval
- 8040 Seminar in Police and Society
- 8050 Seminar in Corrections
- 8060 Seminar in the Criminal Court System
- 8070 Seminar in Criminal Law and Procedure
- 8080 Seminar in Juvenile Justice
- 8090 Seminar in Theoretical Criminology
- 8100 Criminal Justice Organization, Administration and Management
- 8110 Criminal Justice Planning and Change
- 8180 Criminal Justice Internship
- 8200 Special Problems in Criminal Justice
- 8316 Correctional Law
- 8356 Community-Based Corrections

Elective Cognate Courses
In consultation with an adviser the student selects four courses in a related field. Suggested fields include, but are not limited to: business administration, psychology, political science, social work and sociology. Satisfactory completion of the comprehensive examination also is required.

Master of Science
The Master of Science degree is a 36-credit hour non-thesis program. This degree program offers the student a choice of either the standard Master of Science curriculum or a Master of Science with an option in Public Administration, a Master of Science with an option in Counseling, or a Master of Science with an option in Social Work. The Public Administration option is especially recommended for administrators or future administrators within the criminal justice system. The Counseling option and the Social Work option are designed for those who wish to work with juvenile and adult offenders in the criminal justice system.

To earn the Master of Science degree in Criminal Justice, the student must satisfactorily complete the following course requirements:

Required Core Courses
- 8000 Professions in Criminal Justice
- 8010 The Nature of Crime
- 8020 Seminar in Administration of Justice
- 8030 Criminal Justice Research Theory and Methodology

Elective Criminal Justice Courses
Student selects five courses with adviser approval
- 8040 Seminar in Police and Society
- 8050 Seminar in Corrections
- 8060 Seminar in the Criminal Court System
- 8070 Seminar in Criminal Law and Procedure
- 8080 Seminar in Juvenile Justice
- 8090 Seminar in Theoretical Criminology
- 8100 Criminal Justice Organization, Administration and Management
- 8110 Criminal Justice Planning and Change
- 8180 Criminal Justice Internship
- 8200 Special Problems in Criminal Justice
- 8316 Correctional Law
- 8356 Community-Based Corrections
Master of Science
Public Administration Option
To earn the Master of Science degree in Criminal Justice, Public Administration option, the student must satisfactorily complete the following course requirements:

Required Core Courses .............................................. 9
8000 Professions in Criminal Justice
8010 The Nature of Crime
8020 Seminar in Administration of Justice
8030 Criminal Justice Research Theory and Methodology

Required Courses ................................................... 12
8050 Survey of Public Administration
or
8440 Seminar in Organizational Development in Public Agencies
8406 Public Budgeting
or
8480 Seminar in Public Financial Administration
8416 Public Personnel Management
or
8460 Public Personnel Administration
(if credit has been earned in PA 4410)
8420 Seminar: Introduction to Public Organization

Elective Criminal Justice Courses .......................... 15
Student selects five courses with adviser approval:
8040 Seminar in Police and Society
8050 Seminar in Corrections
8060 Seminar in the Criminal Court System
8070 Seminar in Criminal Law and Procedure
8080 Seminar in Juvenile Justice
8090 Seminar in Theoretical Criminology
8100 Criminal Justice Organization, Administration, and Management
8110 Criminal Justice Planning and Change
8180 Criminal Justice Internship
8190 Independent Study
8200 Special Problems in Criminal Justice
8316 Correctional Law
8356 Community-Based Corrections

Satisfactory completion of the comprehensive exam also is required.

Master of Science
Social Work Option
To earn the Master of Science degree in Criminal Justice, Social Work option, the student must satisfactorily complete the following course requirements:

Required Core Courses .............................................. 9
8000 Professions in Criminal Justice
8010 Nature of Crime
8020 Seminar in Administration of Justice
8030 Criminal Justice Research Theory and Methodology

Required Social Work Courses ................................. 12-14
General Option
8000 Human Behavior and the Social Environment... 4
8050 Social Welfare Policy, Services and Analysis... 4
8100 Social Work Practice I (Generic).............. 2
8120 Social Work Practice II (Micro) .......... 2
8140 Social Work Practice III (Macro) .......... 2

Child Welfare Option............................................. 12
8000 Human Behavior and the Social Environment... 4
8100 Social Work Practice I (Generic)......... 2
8180 Permanence for Children
8660 Social Work in Child Welfare

Minority Emphasis.................................................. 14
8000 Human Behavior and the Social Environment... 4
8050 Social Welfare Policy, Services and Analysis... 4

Student selects two of the following courses:
8620 Institutional Racism
8876 Social Work with Black Youth
8876 Social Work with Hispanics
8876 Social Work with American Indians

Elective Counseling Courses ..................................... 6
In consultation with an adviser the student selects two additional counseling courses. Suggested courses include, but are not limited to the following:
8270 Group Techniques in Guidance
8370 Group Counseling Theory and Practice
8076 Crisis Intervention/Suicidology
8200 Counseling Theories

Elective Criminal Justice Courses .......................... 15
Student selects five courses with adviser approval:
8040 Seminar in Police and Society
8050 Seminar in Corrections
8060 Seminar in the Criminal Court System
8070 Seminar in Criminal Law and Procedure
8080 Seminar in Juvenile Justice
8090 Seminar in Theoretical Criminology
8100 Criminal Justice Organization, Administration, and Management
8110 Criminal Justice Planning and Change
8180 Criminal Justice Internship
8190 Independent Study
8200 Special Problems in Criminal Justice
8316 Correctional Law
8356 Community-Based Corrections

Satisfactory completion of the comprehensive exam also is required.
Elective Criminal Justice Courses ................................13-15
Student selects five courses with adviser approval:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>8040</td>
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<td>Community-Based Corrections</td>
</tr>
</tbody>
</table>

Satisfactory completion of the comprehensive exam also is required.

Course Descriptions

4310/3316 Correlational Law (3) The law of corrections as it pertains to the institutionalized and community-based offender will be considered. Legal issues relating to sentencing (including the death penalty), prisoner's "rights" in institutions and community-based corrections, procedural protections before the loss of offender "rights" and restoration of civil rights will be examined. Prereq: None.

4350/3356 Community-Based Corrections (3) A course for advanced students with special interest in the correctional process as applied in a community setting. It is designed specifically to focus on probation, parole and other current community-based strategies for dealing with the offender. Prereq: None.

8000 Professions in Criminal Justice (0) A required non-credit course for graduate students in criminal justice. Intended to familiarize the beginning graduate student with the criminal justice profession including such topics as the historical development of the field of criminal justice and professional organizations, job opportunities and the use of reference materials. Prereq: Admission to graduate program in criminal justice.

8010 The 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. Prereq: Graduate and permission of instructor.

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. Prereq: Graduate and permission.

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. Prereq: Graduate and permission.

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. Prereq: Graduate and permission of instructor.

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. Prereq: Graduate and permission of instructor.

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. Prereq: Graduate and permission of instructor.

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 rights to counsel, search and seizure and interrogation will be examined. Prereq: Graduate and permission.

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. Prereq: Graduate and permission.

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. Prereq: CJUS/SOC 3350, graduate and permission of instructor.

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. Prereq: Acceptance in the graduate college and permission of instructor.

8110 Criminal Justice Planning and Change (3) This course provides an introduction to the basic concepts, theories and processes in criminal justice planning. Course content includes examination of planning data sources and application of fiscal planning, manpower planning and strategic policy planning to criminal justice. Prereq: Graduate and permission.

8120 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. Prereq: Successful completion of 15 hours of graduate work and permission of instructor.

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. Prereq: Graduate hours in major department and permission of instructor.

8200 Special Problems in Criminal Justice (3) A course devoted to an exploration and analysis of contemporary special problems in the broad spectrum of law enforcement and corrections. Prereq: CJUS graduate student and permission of instructor.

8990 Master's Thesis (1-6)
The Master of Arts program in Dramatic Arts offers concentrated study in theatre history, literature, theory and production. The overall goal of the program is to enrich the student's understanding of theatre as a humanistic and liberalizing art, to broaden and deepen an appreciation of the drama and theatre history, to introduce the student to research in theatre and drama, and to strengthen skills and creativity in the arts of theatre production.

The program is broadly flexible and allows each student to design a plan of study that meets individual needs and goals. With four main stage productions and at least two graduate-directed productions each year, opportunities for applied work are considerable. The combination of practical production activity and stimulating coursework creates for the advanced student a wide variety of learning situations. As part of an urban university, moreover, the UNO Dramatic Arts Department has close ties to the Omaha community and encourages work that takes advantage of these ties. For although the department is committed to nurturing a greater understanding of American and world theatre, our natural constituency is the Omaha and Great Plains region, and it is these people we serve through our efforts in theatre scholarship, production and outreach.

An applicant for graduate study in Dramatic Arts must present a minimum of 15 undergraduate semester hours with a "B" average in appropriate courses or experience equivalent to undergraduate training in theatre. Background in costume, makeup, stagecraft, design, lighting, acting and literature must be demonstrated by transcript, by further undergraduate coursework or by demonstrating proficiency. In order to begin a review of credentials, the student should contact the chairperson of the Graduate Program Committee (phone 402-554-2406 for further information). Deficiencies will be determined by the Graduate Program Committee and ideally should be made up in the first year of study.

The department accepts the Miller Analogy Test (MAT) as well as the Graduate Record Examination (GRE) for admission. The graduate program in Dramatic Arts is designed to assure that students are familiar with the field as a whole and that they can demonstrate master's-level competence through a thesis or final project and a written comprehensive examination at the conclusion of their coursework.

The student is eligible for admission to candidacy for the Master of Arts program when a Plan of Study has been developed to satisfy all deficiencies, a three-hour research methods course and six hours of graduate courses completed, and either the MAT or GRE scores put on file. Upon eligibility for candidacy, the student will submit the Plan of Study to the Graduate Faculty via the chairperson of the Graduate Program Committee.

All candidates are required to take a course in research methods in their first 12 hours of program study and to complete one of the following plans of study:

**Option I:**
Successful completion of at least 24 semester hours of coursework including at least 12 hours in 0-level courses; plus a thesis (six credit hours) based on a proposal approved by the student's committee and defended orally before the committee when completed.

**Option II-A or -B:**
Successful completion of at least 30 (Option A) or 33 (Option B) semester hours of coursework including at least 12-15 hours in 0-level courses; plus a Final Project (six or three hours, depending on Option A or B)* consisting of major responsibility in a production approved by the Dramatic Arts faculty and the Graduate Program Committee in Dramatic Arts or an equivalent major effort in, for example, playwriting or a project of sufficient challenge and depth which is approved by the Dramatic Arts 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 committee.

Students are directed to obtain a copy of the M.A. Program Guidelines from the department office for more detailed information on the program process and requirements.

*At least one-half the hours of non-thesis coursework in a plan of study should be in courses which are restricted to graduate students only (9-0 or 9-0).
Course Descriptions

4010-4020/8016-8025 Advanced Projects in Dramatic Arts (1-3)
Special projects in dramatic arts supplementing regular courses; individual research projects; combined study and practicum. Prereq: 9 hours of dramatic arts in the general area to be studied and permission of instructor.

4080/8086 Advanced Oral Interpretation (3) Theories and forms of interpretation from antiquity to the present. Preparation and presentation of a recital. Prereq: DART 1090.

4310/8316 Advanced Acting Studio I: Characterization and Analysis (3) Advanced work in the technical skills of voice, speech, movement and text analysis. Exploration of the mask to create character. Development of a technique designed to meet the needs of any text.

4320/8326 Advanced Acting Studio II: Historical Periods and Styles (3) The fundamental theories and practices of major styles of acting from ancient Greece to the 18th century, including interpretation of outstanding dramatic literature. Prereq: DART 2310-2320 or permission of instructor.

4330/8336 Advanced Acting Studio III: 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. Prereq: Graduate with an undergraduate major or minor in theatre or permission of instructor.

4340/8346 Advanced Acting Studio IV: Auditioning (3) An acting class designed to develop auditon skills and material as well as cultivate a working knowledge of the business of acting. Prereq: Graduate with an undergraduate major or minor in theatre or permission of instructor.

4440/8445 Directing: Rehearsal and Performance (3) A practicum in play selection, analysis, casting, directing and performing. Prereq: DART 1010, 1630, 2310 or permission of the instructor.

4500/8505-8516 Costume Design (Each 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 techniques. Prereq: DART 2060, 2510; ART 1100, 1210 or permission of instructor.

4610/8616 Scenic Design (3) Principles of composition perspective and color for the stage; the designer's approach to the play, production of ground plans, elevations and sketches. Prereq: DART 1010, 2060, 1630, 2630 and junior. For 8616, graduate with an undergraduate major or minor in theatre or permission of instructor.

4670/8676 Stage and TV Lighting (3) Characteristics and control of light and color and their application in the theatre and television; elementary electricity; lens systems; reflectors; lamps; control systems. Prereq: DART 1010, 1630, 2060.

4710/8716 History of the Theatre to 1642 (3) A historical survey of the theatre and its literature from its origins to 1642.

4720/8725 History of the Theatre Since 1642 (3) A historical survey of theatre and its literature from 1642 to the present.

4730/8736 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. Prereq: Permission of instructor.

4750/8755 Theatre and Social Change (3) The course will combine both research and practice in theatre that involves social change. Students will study the history of such theatre, with special focus on developments in the 20th century. All research will be accompanied by several projects whereby students will create theatre for social change. Prereq: Graduate in Dramatic Arts. Graduate outside Dramatic Arts with sufficient background in theatre and sociology/political science require permission of instructor.

4830/8836 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 subject of the seminar will change from year to year. Prereq: Permission of instructor.

6000 Special Topics in Theatre and Drama (3) A variable content course dealing with theatre and History. Each offering will treat a single aspect of theatre or drama in depth—e.g., Shakespeare and performance, the history of acting theory, the history of theatrical design, etc. Prereq: Graduate or permission of instructor.

8430 Seminar in Play Direction (3) An in-depth study of the principles of play direction. Prereq: Graduate and permission of instructor.

8550 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. Prereq: DART 1010, 3660, 4610, 4710, 4720 or permission.

8900 Dramatic Arts Research Methods (3) This course is designed to introduce graduate students in dramatic arts to basic techniques of scholarly research: gathering materials, defining the problem and preparing the manuscript. Prereq: Admission to graduate program in Dramatic Arts.

8910 Dramatic Theory and Criticism (3) For advanced students of dramatic literature. Important dramatic theories and criticism from antiquity to the present. Prereq: DART 1010 or permission of instructor.

8920 Seminar in Contemporary Theatre Aesthetics (3) Research and dialogue in the aesthetic theories and movements in the contemporary theatre. Emphasis on the sources, background and configuration of theatrical styles in this century. Prereq: DART 1010, 4710, 4720 and ENGL 2520 or permission.

8980 Final Project (1-3) Final project for Option II. Prereq: Admission to candidacy and approval of the project proposal.

8990 Thesis (1-3) Independent research project written under the supervision of an advisor.
ECONOMICS

PROFESSORS:
Lee, Nielson, Sindt, Turner, Zahn
ASSOCIATE PROFESSORS:
Baum, Corcoran, Diamond, Sosin, Wohar

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 forecasting, simulation, financial analysis, policy analysis and related work.

Admission is based on GPA and undergraduate field of study.

Master of Science
The M.S. program consists of core requirements (12 hours), an elected specialization (nine to 12 hours), electives (15 to 18 hours, depending on the specialization elected), and a comprehensive examination in the area of specialization. No thesis is required for the M.S. degree. All courses are three credits.

Total hours required: ........................................... 36

Each student must complete the core requirements.
Core ........................................................................ 12
ECON 8200 Microeconomic Theory
ECON 8220 Macroeconomic Theory
ECON 8300 Econometrics
ECON 8306 Quantitative Applications in Economics and Business
*Not required for students demonstrating satisfactory mathematical skills. In that case, add three hours to electives.

Each student may elect a specialization from those suggested below. Other specializations may be approved by the Economics Program Graduate Adviser. Specializations consist of either nine or 12 hours of interrelated graduate-level coursework.

Suggested Specializations
Business Economics ................................................. 12
ECON 8180 Seminar in Labor Economics
ECON 8210 Managerial Economics
ECON 8216 Industrial Organization
ECON 8230 Business Conditions Analysis
ECON 8310 Forecasting
ECON 8456 Monetary Theory and Policy
ECON 8616 International Trade
or ECON 8232 International Monetary Economics

Monetary and Financial Economics ................................ 12
(select four courses)
ECON 8010 Public Finance
ECON 8456 Monetary Theory and Policy
ECON 8459 Seminar in Money and Banking
BSAD 8530 Banking and Financial Markets
ECON 8262 International Monetary Economics
Electives ..................................................................... 9

International Economics ........................................... 9
(select three courses)
ECON 8616 International Trade
ECON 8626 International Monetary Economics
ECON 8650 Seminar in International Economics
ECON 8666 International Economic Development
Electives .................................................................. 12

Public Policy Economics ........................................... 9
ECON 8010 Public Finance
ECON 8216 Industrial Organization
ECON 8326 Natural Resource Economics
BSAD 8566 State and Local Finance

General ....................................................................... 12
(Graduate-level elective courses. Approval of Economics Program Graduate Adviser required.)

Master of Arts
The M.A. program consists of core requirements (15 hours), an elected specialization, electives as necessary (including six hours of thesis), a comprehensive exam in the area of specialization, and a defense of the thesis.

Total hours required: .............................................. 30

Core ........................................................................ 15
ECON 8200 Microeconomic Theory
ECON 8220 Macroeconomic Theory
ECON 8266 History of Economics Thought
ECON 8306 Quantitative Applications in Economics and Business
ECON 8330 Econometrics
*Not required for students demonstrating satisfactory mathematical skills. In that case, add three hours to electives.

Electives include ECON 8990 Thesis ......................... 6

Suggested Specializations
Specializations are the same as those described under the M.S. program, with the following additional specialization available for the M.A. program:
Real Estate and Land Use Economics ......................... 18
BSAD 8600 Real Estate and Land Use Economic Theory
BSAD 8610 Current Problems in Real Estate
BSAD 8990 Thesis** ............................................... 6
Electives ................................................................... 6

**Must be written under the supervision of a member of the RELU program.

Course Descriptions
4210 Industrial Organization (3) An analysis of the structure and behavior of industries and their effect on economic performance. Involves detailed applications of microeconomic theories and concepts and provides a basis for public policy evaluations. Prereq: ECON 2010 and 2020 or permission of instructor.
4250 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. Prereq: ECON 2010 and 2020 or equivalent.
4320/8306 Quantitative Applications in Economics and Business (3) The study and application of modern quantitative techniques to problem-solving in economics and business. Prereq: ECON 2010, 2020 and DSCI 2120 or permission of instructor.
4320/8326 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 various public policy prescriptions. Prereq: ECON 2010 and 2020 or permission of instructor.

4450/4456 Monetary Theory and Policy (3) This course traces the development of monetary theory from the classical theory to current monetary theories. Besides the classical theory, the monetary theories of Keynes, the neo-Keynesians, and the neo-classical are examined and compared. The implications of each school for monetary policy are examined. Prereq: ECON 3220 or permission of instructor.

4510/4516 International Trade (3) An analysis of the character of international economic relations. Subjects covered include the economic basis for international specialization and trade, economic gains from trade, commercial policy, economic integration, and economic growth. Prereq: ECON 2010, 2020 or permission.

4520/4526 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. Prereq: ECON 2010 or 2020 or permission of instructor.

4550/4566 International Economic Development (3) Problems relating to early stages of economic development; investment priorities, mobilizing savings, and policies and programs are studied. Prereq: ECON 2010 and 2020 or permission of instructor.

4610 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. Prereq: ECON 3220 or 4210 or BSAD 8100.

4650 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 (K-12) with sufficient background and understanding to aid in the recognition of economic issues and the teaching of economic concepts and principles. Prereq: No previous course work in economics. Not open to Economics majors.

4660 Seminar in Labor Economics (3) A study and investigation of current development and issues involving labor institutions, labor relations, wage theories and employment policies. Prereqs: ECON 3200, 3220 and three hours of credit in undergraduate labor economics or permission.

4670 Seminar in Macroeconomics (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. Prereq: ECON 3200, 3220 and 8306 or permission.

8210 Managerial Economics (3) Microeconomics for graduate students of business. Economic analysis of the business firm and its environments, with emphasis on the role of structure, production possibilities and cost factors. Additional consideration is given to the theory of the firm under conditions of uncertainty. Prereq: Graduate in Economics or in College of Business Administration, ECON 2020 or equivalent, and a course that includes a basic introduction to the main rules for differential functions. (Same as BSAD 8100)

8220 Seminar in Macroeconomics (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. Prereq: ECON 3200 and 3220 or permission.

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. Prereq: ECON 2020 or BSAD 6180. (Same as BSAD 8050)

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 environments in which economic decisions are made; and (c) the evaluation of policies designed to solve economic problems. Prereq: Graduate in Executive MBA program.

8290 Research Methods in Economics and Business (3) A study of current quantitative research techniques in business and economics. The student will become familiar with these techniques through text materials, journal studies and actual applications. Prereq: ECON 8306 or 8290 or permission.

8300 Econometrics (3) The study of the underlying assumptions, techniques and applications of single and multiple equation regression analysis in economics. Prereq: ECON 8306 or 8290 or permission.

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. Prereq: BSAD 8000 or ECON 8300 or permission of instructor. (Same as BSAD 8310)

8450 Seminar in Money and Banking (3) Original research and writing of papers on basic problems in the area of money and banking. Prereq: Six hours in undergraduate monetary courses or permission of the instructor.

8460 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. Prereq: Graduate in Executive MBA program and ECON 2010 and 2020, or ECON 8100, or the initial economics course in the Executive MBA course sequence.

8560 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. Prereq: Graduate in Executive MBA program.

8650 Seminar in International Economics (3) An analysis of the theory of international trade and the working of the international monetary system. Prereq: ECON 3650 or 4660 or permission of instructor.

8660 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. Prereq: At least six hours of upper division course work in economics or permission of the instructor. (Same as SOC 8660)

8670 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, decision-making and measurement/techniques are examined. Prereq: At least six hours of upper division course work in economics or permission of instructor.

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. Prereq: Graduate student in good standing and as indicated for specific workshop or seminar. (Same as BSAD 8910)

8920-8930 Independent Study (Each 1-3) Guided independent study and research under tutor supervision. Prereq: Graduate student in economics and permission of instructor.

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.
EDUCATIONAL ADMINISTRATION AND SUPERVISION

PROFESSORS:
Petrie, D. Weber

ASSOCIATE PROFESSORS:
Ward

Master of Science
An applicant for admission to the program for the Master of Science degree in Educational Administration and Supervision (with endorsement) must hold a Bachelor's degree from an accredited institution and be certificated at either or both the elementary or secondary teaching level. The degree program of at least 39 credit hours must include balanced coverage of the major areas of educational administration and supervision.

An applicant for admission to the program for the Master of Science degree in educational administration and supervision (without endorsement) must hold a Bachelor's degree from an accredited institution.

Prior to admission to candidacy, all students must successfully pass the designated qualifying examination.

All programs will be designed with the student's needs in mind and will be developed by the student with advice and counsel of a major adviser.

Specialist in Education
An application for admission to the Specialist in Education degree (with endorsement) in the Department of Educational Administration and Supervision must be certificated at either or both the elementary or secondary teaching level and hold a Master's degree from an accredited institution. An applicant for admission to the Specialist in Education degree (without endorsement) in the Department of Educational Administration and Supervision must hold a Master's degree from an accredited institution.

These programs of study are designed to best harmonize the student's needs and ambitions. Together with the Master's degree, the total program must accumulate to not less than 69 graduate credit hours. The program is carried out under the direction of a graduate faculty supervisory committee. Prior to admission to candidacy, all students must successfully pass the designated qualifying examination.

Students seeking added endorsements must be pursuing a committee approved program. The assistance of a faculty adviser should be sought at the starting point.

Students in educational administration can earn degrees structured to include coursework leading to appropriate certificates. Also, coursework taken to satisfy requirements for the M.S. and Ed.S. degrees in educational administration normally can be articulated fully into the plan of study for an Ed.D. or Ph.D. in Administration. Additional information can be obtained from the chairperson, Educational Administration and Supervision, UNO (554-2721).

Course Descriptions
4880/8889. Administration of the Instructional Materials Center (3) A course designed for students who wish to prepare themselves for the administration of an educational media program within an elementary and/or secondary school. (Same as TED 8889)

8000 Special Studies in Educational Administration and Supervision (3) A series of intensive courses especially designed for educational administrators and supervisors scheduled as regular seminars or workshops, according to purpose.

8020 Governance and Politics in Educational Administration (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. Prereq: Admission to Graduate College.

8030 Introduction to Theory in Educational Administration (3) This course is a survey of the theoretical foundations of educational administration. Theory is applied in the description and analysis of educational organizations. Prereq: Admission to Graduate College.

8050 School-Community Relations (3) This program is designed to acquaint the student with all aspects of school-community relations. Primary attention will be given to study and research of effective principles and practices in school-community relations.

8060 Administering School Discipline (3) Course will be an opportunity for students to develop increased awareness of the circumstances in the schools and professional skills relating to school discipline and how discipline might be administered more successfully. Students will develop model rules, regulations, and policies and procedures based on disciplinary strategies and general prevention programs. Prereq: Graduate.

8100 Independent Study in Educational Administration (1-3) Individual or group study and analysis of specific problems in educational administration and supervision. Prereq: Admission to the department.

8250 Data Processing in Educational Administration (3) A study of systems as planning bases for administration, and the role of electronic data processing in implementation.

8300 Research in Educational Administration (3) This course includes a survey of research in educational administration and a study of the application of specific basic and intermediate statistical procedures in research in the field. Prereq: Admission to the specialist program in Educational Administration and Supervision or permission of instructor.

8400 Practicum in Educational Administration and Supervision (3) Designed to provide guided study and practice in elementary, secondary, and general administration and supervision as the interests and needs of the student requires. Prereq: Completion of 24 hours of graduate study and approval of written application.

8410 Practicum in Educational Administration and Supervision (3) Continuation of Education 8400. Continued study and practice under guidance in elementary, secondary or general administration and supervision as the needs of the student requires.

8450 Administration and Supervision in Elementary Schools (3) The nature, principles and functions of modern administrative and supervisory practices as they relate to the elementary school.

8470 Administration and Supervision in Secondary Schools (3) The nature, principles and functions of modern administrative and supervisory practices as they relate to the secondary school.

8490 Theory and Practice of Supervision (3) An in-depth inquiry into the nature and function of supervision in the modern school. This course will incorporate the salient psychological, sociological, business administration and educational administration concepts of personnel and organizational development as they apply to educational systems. Prereq: EDAD 8350, 8460 or 8470.

8550 School Business Management (3) An analysis of the functions of business management; budgetary procedures; financial accounting, auditing and reporting; management of funds; purchasing procedures and inventory; administration and protection of property; and administration of transportation.

8560 School Finance (3) A study of the sources of school financing; local, state and national. In addition to covering this area from a historical point of view, emphasis is placed on current problems in school finance.
8620 Educational Plants and Their Equipment (3) Designed to give the school administrator competence in planning the school building; site selection, building construction and design; school furniture and equipment; maintenance and operation; rehabilitation and remodeling; scheduling of work; and custodial care. Prereq: Graduate.

8700 Administration and Staff Personnel (3) This course deals with personnel policies, problems and issues in the following areas: teacher recruitment, orientation, evaluation, promotion, tenure, retirement, professional organizations and legal status. Emphasis will be placed upon the techniques of democratic administration.

8710 Interpersonal Relationships in Educational Administration (3) This course is designed specifically to deal with interpersonal and group relations. It should be useful to those administrators who recognize the need to increase their knowledge and skill in human relations.

8720 Multicultural and Non-Sexist Awareness (1) A course for educators seeking renewal of their current teaching and administration credentials. The content of the course is to develop an awareness of the cultural diversity in American society and to develop skills to effectively meet the needs of students, parents and others who make up their school communities. Prereq: A valid Nebraska teaching and/or administrative certificate of endorsement.

8800 Administration and Supervision of Vocational Education (3) Basic concepts for administration and supervision of vocational education, as related to the needs of the superintendent, principal, supervisor. (Same as TED 8800)

8810 Urban School Administration (3) This course is designed to acquaint students with urban problems and issues which most significantly affect the administration of city schools.

9000 Seminar In Research Design (3) A seminar designed to acquaint students with the principles of research design and to provide experience in the application of these principles to problems in educational administration. Prereq: Admission to education specialist program.

9010 Advanced Seminar in Educational Administration (3) Participation is limited to individuals who have been admitted to candidacy for the Specialist in Education degree with a major in school administration. Emphasis will be placed upon the theory and techniques of administration. Prereq: Admission to education specialist program.

9050 Collective Bargaining in Education (3) The course is an overview of labor relations in educational settings. Attention will be given to bargaining, methods of negotiations, competencies needed and ratified agreements. Simulations will be used. Prereq: Graduate.

9110 Field Project In Educational Administration (1-3) The study of a problem in the area of school administration, employing the techniques of research. Prereq: Admission to the education specialist program.

9200 Supervision Practicum (3) A practicum course for graduate students in educational administration and supervision. Prereq: Master’s degree and permission.

9500 Internship In School Administration and Supervision (3 hours per semester; may take two semesters). A systematic exposure to the operation of educational institutions. Studying educational administration and supervision on site, the graduate student's responsibilities will be documented in a set of written specifications agreed to by the student, the site supervisor and the university professor. Prereq: Master’s degree and permission of department chairperson.

9540 School Law (3) This course is concerned with laws related to schools. Topics include certification, contract, negligence, curriculum, admission, pupil control and transportation. Each is approached through study of most recent court pronouncements.
ENGLISH

PROFESSORS:
Baker, Boss, Newkirk, Skau, Walsh

ASSOCIATE PROFESSORS:
Detisch, Kubitschek, McKenna, Mundell

ASSISTANT PROFESSORS:
Mordaunt, Peterson, Raabe, P. Smith, Sadlek

Master of Arts

To be admitted to graduate study in English, a student should have completed at least 18 credit hours in undergraduate English courses above the freshman level with an average grade of "B" or above. In addition, the student is required to pass either the Miller Analogical Test (MAT) with a score above 30 or the general aptitude section (but not the advanced area) of the Graduate Record Exam (GRE) with a verbal score above 350. For foreign students a score of 600 on the TOEFL examination is now accepted as equivalent to the minimum of 30 on the MAT or 350 on the GRE.

All candidates for Master of Arts degrees with majors in English are required to take English 8010 (Introduction to Literary Research) within the first nine hours of graduate study and to complete one of the following plans of study:

Option I: Successful completion of 24 credit hours in coursework, including at least 12 hours in seminar-level courses; plus a thesis (six credit hours) on an approved topic accepted after oral defense before a faculty committee; plus a comprehensive written examination over a designated body of literature or language prepared and judged by a faculty committee.

Option II: Successful completion of 36 credit hours in 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.

The following English seminars vary in emphasis and may be repeated for credit: English 8060, 8080, 8090, 8100, 8150, 8200, 8980 and 9120.

With approval of a student's adviser 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 Plan A (thesis) a minor is six hours; for Plan B (non-thesis) a minor is nine hours. The maximum amount of coursework which may be applied from another discipline or disciplines is the same as that for a minor for Plan A (six hours) or Plan B (nine hours).

The English Department offers a Certificate in Teaching English as a Second Language: requirements include 12 hours of specified coursework, a foreign language, and a specified level of competency in English.

Course Descriptions

4150/6155 Contemporary French and German Novel (3)
Comparative study of selected contemporary French and German novels in translation. Prereq: Graduate, permission of instructor. (Same as FREN 4150/6156 and GERI 4500/6156)

4170/6175 Contemporary French and German Drama (3)
Comparative study of selected contemporary French and German plays. Conducted in English with English translations. Prereq: Graduate, permission of instructor. (Same as FREN and GERI 4170/6176)

4160/6166 Chicano Literature and Culture (3)
A study of representative works of Mexican-American, Spanish-American, and American writers, along with their cultural and historical antecedents. Prereq: Graduate, permission. (Same as SPAN 4160/6168)

4250/6256 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. Prereq: Graduate.

4320/6326 Middle English Literature (3)
A survey of the principal writings in English, excluding those of Chaucer, from 1100 to 1500. Prereq: Graduate.

4330/6336 Sixteenth Century Literature (3)
Poetry and prose of the English Renaissance, from its continental origins to the end of the Elizabethan age. Prereq: Graduate.

4340/6346 Chaucer (3)
A literary, linguistic and historical study of the works of Geoffrey Chaucer: his dream visions, Troilus and Criseyde and the Canterbury Tales. Prereq: Graduate.

4460/6466 Seventeenth Century Literature (3)
A study of the English poetry and prose from 1600 to 1800 including such authors as John Donne, Ben Jonson, Sir Francis Bacon, Sir Thomas Brown and John Milton. Prereq: Graduate.

4500/6506 Shakespeare's Contemporaries (3)
A study of the development of the English drama, exclusive of Shakespeare, from the beginning to 1642. Prereq: Graduate.

4560/6566 Introduction to Linguistics (3)
An introduction to the concepts and methodology of the scientific study of language; includes language description, history, theory, variation and acquisition as well as semantics, lexicography and foreign language learning. Prereq: Graduate.

4600/6606 Shakespeare (3)
A critical study of selected comedies, tragedies and tragedies by Shakespeare. Prereq: Graduate.

4620/6626 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. Prereq: Graduate.

4640/6646 The Eighteenth Century English Novel (3)
Readings in the English novel from Daniel Defoe to Jane Austen. Prereq: Graduate.

4650/6656 The Nineteenth Century English Novel (3)
Readings in the English novel from Jane Austen to Thomas Hardy. Prereq: Graduate.

4660/6666 The Twentieth Century English Novel (3)
Readings in the English novel from Joseph Conrad to the present. Prereq: Graduate.

4690/6696 History of English (3)
A study of the structural development of the English language. Prereq: Graduate, ENGL 4580/5856 or permission.

4700/7876 The Modern Familiar Essay (3)
A study of the modern familiar essay, with an emphasis on writing the Informal essay. Prereq: Any of the following: ENGL 2400, 2430, 2000.

4750/7856 Rhetoric (3)
A study of contemporary theories of invention, form and style and their application in written discourse, with special emphasis on such contemporary rhetoricians as Kenneth Burke, Ross Winfield, Edward P.J. Corbett, Francis Church and others. Prereq: Graduate.

4760/7876 Composition Theory and Practice (3)
Students will be introduced to current theories (1960s to 1980s) of composition centered on the writing process and including empirical and cognitive emphases. Practice or application involves the evaluation of reported experiments based on current theory, and the design—by class members—of original projects inspired by the course content. Prereq: ENGL 4580 and any 2000 or above writing course or permission.
4780/8786 Structure of English (3) A study of the phonology, morphology and syntax of English as seen by the traditional, structural and transformational-generative theories of language description. Prereq: Graduate, ENGL 4580/8586 or permission.

4810/8816 Literature of the Romantic Period (3) Poetry and prose (excluding the novel) of England from 1798 to 1830. Prereq: Graduate.

4820/8826 Literature of the Victorian Period (3) English poetry and prose (excluding the novel) from 1830 to 1890. Prereq: Graduate.

4850/8856 Twentieth Century English Literature (3) Readings in English literature from Shaw and Yeats to the present. Prereq: Graduate.

4860/8866 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 these works. Conducted in English with readings in French or English. Prereq: Graduate, permission of Instructor. (Same as FREN 4860/8866)

4880/8886 Linguistic Variation (3) The methods and results of linguistic geography, sociological dialectology and modern variation studies with emphasis on American English in the community and the classroom. Prereq: Graduate, ENGL 4580/8586 or permission.

4910/8916 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. Prereq: Graduate.

4930/8936 American Poetry (3) The practice and theory of American poetry from the colonial period up to the contemporary period. Prereq: Graduate.

4946/8946 Studies in Language and Literature (3) Specific subjects (when offered) appear in class schedules. Complete syllabus available in English Department. Prereq: Graduate.

4950/8956 Contemporary Literature: Major Figures and Major Movements (3) A critical study of selected major literary figures or major literary movements which have appeared since World War II. Prereq: Graduate.

4960/8966 Studies 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. Prereq: Graduate, ENGL 4580/8586 and permission of instructor.

4970/8976 The American Novel (3) A critical and historical study of the work of 12 or more significant American novelists of the 19th and 20th centuries. Prereq: Graduate.

4980/8986 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. Prereq: Graduate.

8010 Introduction to 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. Prereq: Graduate.

8040 Seminar: Literary Criticism (3) Literary criticism from the beginnings to the present, with emphasis on the criticism of ancient Greece and Rome, 19th century England and 20th century America. Prereq: Graduate.

8060 Seminar: 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. Prereq: Graduate.

8080 Seminar In the English Renaissance (3) A seminar in a few significant literary figures of the English Renaissance. Prereq: Graduate.

8090 Seminar: The Restoration and Eighteenth Century (3) A detailed study of selected English authors and works of the Restoration and the 18th century (1660-1800). Prereq: Graduate.

8100 Seminar: Victorian Literature (3) An intensive study of selected Victorian authors and their works. Prereq: Graduate.

8130 Topical Seminar In English (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.) Prereq: Graduate.

8140 Seminar: John Milton (3) Intensive seminar in the major works of John Milton and investigation of specific critical and scholarly problems. Prereq: Graduate.

8200 Seminar In Middle English Literature (3) A study of selected writings in Middle English. Prereq: Graduate and one course in Middle English language or writings.

8250 Seminar In Chaucer (3) A study of selected works of Geoffrey Chaucer. Prereq: Graduate and one course in Middle English language or writings.

8500 Independent Study (1, 2, or 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 offerings and who has demonstrated capability of working independently. May be repeated for credit once. Prereq: Graduate, permission of instructor, admission to candidacy, and no "incompletes" outstanding.

8990 Thesis (3-6) Independent research project written under the supervision of an adviser. Prereq: Graduate, permission of thesis director.

9120 Seminar: Shakespeare (3) Critical analysis of ten tragedies, ten histories or ten comedies of Shakespeare. Prereq: Graduate.
GEOGRAPHY

PROFESSORS:
Gildersleeve, Shroder
ASSOCIATE PROFESSORS:
Engelmann, Maher, Peake, M. P. Peterson

Master of Arts
The Master of Arts degree in Geography offered by the Department of Geography-Geology requires a minimum of 24 semester hours of approved graduate work in geography or related disciplines, plus six semester hours of thesis for a total of 30 semester hours.

Three courses are required: GEOG 8000 History and Philosophy, GEOG 8026 Quantitative methods and GEOG 8500 Research Methods. Students are expected to attend General Seminar. The remainder of the program consists of courses scheduled by the student with the advice of the Graduate Program Committee. At least one-half of all coursework must be in "0"-level courses. All students must take a diagnostic written examination prior to undertaking coursework. Procedures for examinations and theses are outlined in the Geography Graduate Student Handbook.

Admission Requirements
In addition to the requirements of the Graduate College, an applicant for admission to the Master of Arts degree program in geography must 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 are furthermore advised to include computer science in their program of study. The applicant should have a GPA in geography of at least a 3.0 on a 4.0 scale.

Course Descriptions

4010/8016 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. Prereq: Three hours of geography.

4020/8026 Quantitative Methods in Geography (3) The understanding and appreciation of quantitative techniques in geography. Emphasis is placed on two-dimensional sampling theory and design, graph theory and spatial statistics. Prereq: MATH 1520 or permission.

4030/8036 Computer Mapping and Data Analysis (3) Computer techniques in mapping and analyzing area data. Emphasis is placed upon address systems as input to various mapping and statistical programs. Prereq: GEOG 3530 and a course in introductory statistics.

4050/8056 Geographic Information Systems (3) An introduction to data manipulation and data base management of geographic information. Topics include geographical data input, storage, maintenance, analysis, retrieval and display. Current geographic information systems are examined. Particular attention is given to the combination of remote sensing imagery and cartographic data base. Prereq: GEOG 3530 or 4630/8636 and CSCI 1610 or its equivalent.

4100/8106 Biogeography (3) This course is intended as an introduction to biogeography, the study of the distribution of organisms in space and time. Prereq: BIOL 1750 or GEOG/GEOG 3100 or BIOL 3100, graduate. (Same as BIOL 4100/8106)

4120/8126 Urban Geography (3) A geography of the city from the viewpoint of history, size and situation, external relations, internal relations, and the comparative study of cities.

4140/8146 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. Prereq: Permission. (Same as SOC 4140/8146)

4150/8156 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. Prereq: Graduate.

4230/8236 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.

4250/8256 Landform Studies: 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.


4320/8326 Climatology (3) A study of climatic processes and their effect on shaping the cultural and physical landscape. Emphasis on physical and applied aspects of the field. Prereq: GEOG 1060 or 3510.

4530/8536 Historical Geography of the United States (3) An analysis of historical circumstances behind contemporary patterns of American cultural geography. Prereq: Graduate and HIST 1110 and 1120 or GEOG 1020 or 3520.

4610/8616 Field Methods in Geography and Geology (3) A systematic investigation in lecture and field of techniques for studying and analyzing rock and terrain features, land-use characteristics and the nature of their patterns as a part of the whole geographic and geologic environment. The course is organized to accommodate variable needs of students with different backgrounds and career choices. Prereq: Permission.

4630/8639 Environmental Remote Sensing (3) Analysis of various sensing systems ranging from conventional low-altitude aerial photography through imagery obtained from earth-orbiting platforms such as "Landsat" with emphasis on practical application. Provides basic tools for environmental evaluation.

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. Prereq: Permission.

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. Prereq: Permission.

8210 Seminar in Cultural Geography (3) The philosophy of cultural and historical geography with emphasis on describing and interpreting the cultural landscape. Prereq: Permission.

8310 Geography of Agriculture (3) A systematic study of the characteristics and patterns of world agriculture. Prereq: Permission.

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 a specific subject is duplicated. Course to be offered with approval of Graduate Program Committee and Dean for Graduate Studies. Prereq: Variable.
8510 Advanced Geomorphology (3) A seminar and lecture course on the current concepts and literature in the field of geomorphology. 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. Prereq: GEOG 8256 or 8266 and 1170 or 1070. Permission.

8580 Solis (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. Prereq: GEOG 1060 or 1070 and permission.

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 the formal written report, the student is required to make an oral presentation of research results to General Seminar or a professional meeting. Prereq: Fifteen graduate hours in geography and permission.

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. Prereq: GEOG 4630/8636.

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. Prereq: GEOG 4120/8120.

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.

8680 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. Prereq: Permission and 12 graduate hours in geography.

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. Prereq: Permission. (Same as PA 8810)

8830-8840 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. Prereq: Undergraduate major in one of the social sciences plus six hours of graduate work in one of the social sciences. (Same as PSCI 8830-8840, SOC 8830-8840)

8990 Thesis (1-6) Independent research project written under the supervision of an adviser.

9550 Topics in Regional Geomorphology of North America (3) A seminar on the landforms of North America from the perspective of a particular geomorphic process viewed on a regional basis rather than the general geomorphology of a specific region. Prereq: Permission.
GERONTOLOGY

PROFESSORS: Horacek, Missinne, Thorson, Waskel
ASSISTANT PROFESSOR: Powell

Master of Arts in Social Gerontology

The M.A. in Social Gerontology is designed to help meet the educational needs of two principal groups. First, the degree program is designed for those who are mid-career professionals who wish to gain additional knowledge and insight from the research in the field of gerontology, to interpret the research critically, and who may wish to be prepared to conduct research on their own. A second, smaller group that may benefit from the program consists of those who have gerontology as a primary academic interest and who intend to continue on in pursuit of a doctoral degree.

Potential applicants, then, should recognize that the M.A. in Social Gerontology is not intended to be a practitioner's degree. Those who seek graduate preparation for entering the field of aging in a service capacity might wish to earn the Graduate Certificate in Gerontology in conjunction with a Master's degree in Social Work, Counseling, Public Administration, Health Education, etc. Such career preparation would probably offer more employment opportunities, for example, for the entry-level professional.

Degree Requirements

The program of study for the M.A. will include at least 36 semester hours of coursework including:

1. A minimum of 18 hours of gerontology coursework including: 9110 Applied Social Gerontology; 8446 (or 9460) Aging and Human Behavior; 8676 (or 9670) Programs and Services; and 8940 Practicum. (For some students, the Practicum requirement might be waived in favor of an independent research project prior to thesis work.)
2. Six to 12 hours of coursework in a related area such as administration, counseling, education, or program planning and evaluation.
3. A minimum of six hours of research courses including a methodology course and a statistics or computer applications course.
4. A written comprehensive examination upon completion of coursework.
5. Six hours of GER0 8990 Thesis.

Admission

The general prerequisite for admission is a Bachelor of Arts or Bachelor of Science degree. The student must have achieved a grade point average of at least 3.0 for either the full undergraduate program or for upper division coursework. The student must submit an official copy of current Graduate Record Examination scores at the time of application, with a combined score of at least 1000 on the Verbal and Quantitative sections of the GRE. In addition, the student must submit a completed Information Form for the M.A. in Social Gerontology, a writing sample and two letters of reference. After all application materials have been received, an individual interview will be held with members of the Gerontology Graduate Program Committee.

NOTE: At least one-half the hours on a plan of study must be in courses which are restricted to graduate students only (8--0 or 9--0).

Certificate in Gerontology

In addition to the Master of Arts in Gerontology, a Certificate of Specialization in Gerontology is available. The Board of Regents has established a Certificate in Gerontology that will be awarded upon completion of requirements for the Specialization. The Specialization may serve as an academic minor for students majoring in many of the social and behavior sciences at the graduate level.

Requirements

1. Students wishing to work toward the certificate in Gerontology must make application and be accepted into the Gerontology Program; application also must be made for admission to graduate studies. Those working toward a graduate degree also must be accepted into the degree program of their major department.
2. Coursework requirements consist of a minimum of 15 semester hours in Gerontology. The only required course is GER0 9110 Applied Social Gerontology (three semester hours); the other 12 hours (usually four graduate-level courses) in Gerontology are selected by the student in consultation with the Academic Coordinator of the Gerontology Program. In this manner, individualized programs of study are developed for each student to best meet his or her career goals and interests.
3. A one semester full-time practicum or its equivalent also is required. The goal of this is to give each student practical one-on-one experience with the aged in a service program or agency delivering services to the elderly. Practicum students must register for GER0 8940 Practicum and participate in periodic seminars with the Practicum supervisor of the Gerontology Program.

Example of a Program of Study

Each individual program of study will be tailored to the needs and interests of each student. The following is an example of what one program of study might look like:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER0 9110</td>
<td>Applied Social Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>(required of all students at the graduate level)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GER0 8106</td>
<td>Educational Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>GER0 8466</td>
<td>Aging and Human Behavior</td>
<td>3</td>
</tr>
<tr>
<td>GER0 8676</td>
<td>Programs and Services for the Aging</td>
<td>3</td>
</tr>
<tr>
<td>GER0 8998</td>
<td>Counseling Skills in Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>GER0 8940</td>
<td>Practicum</td>
<td>6</td>
</tr>
</tbody>
</table>
Course Descriptions

4100/8108 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.

4350/8359 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. Prereq: Graduates.

4460/8460 Aging and Human Behavior (3) The course examines different kinds of behavior and the changes which may occur in older age. Applications of various personality theories concerning aging will be considered. Prereq: Three hours gerontology or permission.

4480/8486 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. Prereq: Three hours gerontology or permission.

4500/8509 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. Prereq: GERO 4110/8110.

4510/8510 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 long-term care services. Prereq: GERO 9110. (Same as PA 8516)

4520/8526 Mental Health and Aging (3) An examination of mental health problems that are particular to older people. Prereq: Permission.

4550/8559 Health Aspects of Aging (3) The study of psychological, sociological and physiological factors that influence the health of the aging, with particular emphasis given to biological changes that have implications for disease and health disorders. (Same as HED 4550/8559)

4590/8599 Disorders of Communication in Older People (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. Students are assigned contacts with and written reports of contacts with an older adult who manifests a disorder of communication. Prereq: GERO 4550/8559 or permission.

4670/8676 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. Prereq: Three hours gerontology.

4690/8699 Working With Minority Elderly (3) This course is an interdisciplinary one, designed to provide the student with knowledge of the differing status, attitudes and experiences of the elderly within four major minority groups and to examine various service systems and practice models in terms of their relevance and effectiveness in meeting needs of the minority elderly. Prereq: Senior or graduate in gerontology or social work or permission of instructor. (Same as SOWK 4690/8699)

4750/8756 Mid-Life, Career Change and Pre-Retirement (3) An examination of mid-life as it applies to: the concept of second careers, existing resources and the future of second careers; and the concept and practical implications of pre-retirement planning. Prereq: None. (Same as COUN 4750/8756)

4850/8856 Hospice and Other Services for the Dying Patient and Family (3) This course is designed to involve students in the recognition of fears, concerns and needs of dying patients and their families by examining the hospice concept and other services available in our community. Factual information, readings, professional presentations, films and experiential exercises are offered to aid the student in understanding that hospice is an alternative to the traditional medical model so that when the "cure" system is no longer functional, then the "care" system, hospice, can be offered. Prereq: GERO 8730 or permission. (Same as SOWK 4850/8856)

4980/8986 Counseling Skills in Gerontology (3) This course is intended to help develop basic counseling skills for application in gerontology. Prereq: Permission of instructor.

8260 Counseling Older Adults and Their Families (2) A study of issues related to the counseling of older adults and their families. Prereq: COUN 8240 or permission. (Same as COUN 8280)

8730 Thanatology-Study of Death (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. Prereq: Graduate, three hours gerontology, permission.

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. Prereq: Six hours of gerontology or permission.

8940 Practicum (0-6) This course provides the opportunity to students to share field experiences; to obtain guidance concerning various relationships with agency, staff and clients; and to develop a broad based perspective of the field of aging. Prereq: Nine hours of gerontology and permission.

8960 Directed Readings in Counseling and Gerontology (1-3) A study of recent and current literature on counseling with older people. Prereq: GERO 8960 or COUN 8986, counseling major, or permission.

8970 Personal Values and Aging (1) Course designed to increase students' self-awareness of personal values and feelings related to aging and the aged.

8990 Thesis (0-6) Independent research project required of all students working toward the Master of Arts degree. The thesis is written under the supervision of the thesis advisor and the thesis committee. Prereq: Permission.

9020 Graduate Seminar in Statistical Applications (3) Provides a grounding in statistical methods and data management used in behavioral research, with an emphasis on special research issues with older populations. Prereq: GERO 9110 and a research methods course.

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. Prereq: Graduate. (Same as SOC 9110)

9460 Seminar in Aging and Human Behavior (3) An in-depth study of sexual, religious and love behavior in older people. This seminar is intended to explain the interaction between these different aspects of behavior and the meaning of life and suffering connected with it in older age. Prereq: Graduate or permission of instructor.

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. Prereq: Twelve hours of psychology and/or gerontology or permission. (Same as PSYCH 9480)

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. Prereq: GERO 9110 or permission of instructor.
HEALTH, PHYSICAL EDUCATION AND RECREATION

PROFESSORS:
Berg, Corbin, Flynn, Kidd

ASSOCIATE PROFESSORS:
Blanke, Buchanan, Greer, Latin, Lundahl, Metal-Corbin, Stacy, Stewart

ASSISTANT PROFESSORS:
Brasile, Hautala, Thigpen

The School of Health, Physical Education and Recreation offers graduate courses in the areas of health education, physical education and recreation and leisure studies. It is possible to attain either a Master of Arts or a Master of Science degree with a major in one of the following areas: health education, physical education (physical education pedagogy, physical education coaching, exercise science track without an internship, exercise science with an internship and fitness management) and recreation and leisure studies.

The Master of Arts degree, which does not require a thesis, requires a minimum of 36 semester hours. Students desiring the Master of Science degree will complete a program of at least 30 semester hours, six hours of which will be devoted to a thesis.

Master of Arts and Master of Science
Core Course (3 hours)
HPER 8030 Research in HPER

Specialization Courses (12-24 hours)
HPER 8000 Special Studies
HPER 8100 Research Project
HPER 8220 Problems and Issues in HPER
HPER 8300 Analysis of Research and Literature in HPER
HED 8080 Topics in Health Education
HED 8206 Health Promotion at the Workplace
HED 8250 Human Sexuality
HED 8330 Alcohol Education
HED 8558 Health Aspects of Aging
HED 8600 Health Behavior
HED 8730 Thanatology
HED 8850 Health Aspects of Stress Management
HED 8990 Health Education Practicum
PE 8016 Laboratory Methods in Exercise Science
PE 8076 Optimizing Sports Performance
PE 8176 Motor Assessment and Performance
PE 8186 Practicum in Physical Education for the Disabled Child
PE 8240 Sport in American Culture
PE 8260 Supervision of Physical Education
PE 8280 Curriculum in Physical Education
PE 8370 Improvement of Instruction in Physical Education
PE 8400 Motor Learning and Performance
PE 8450 Kinesiological Analysis of Motor Skills
PE 8506 Behavioral Aspects of Coaching Athletics

PE 8845 Survey of Microcomputer Applications in Health, Physical Education and Recreation
PE 8856 Cardiac Rehabilitation Principles and Practices
PE 8865 Scientific Aspects of Strength Development
PE 8906 Behavioral Aspects of Coaching
PE 8910 Internship in Exercise Science
PE 8936 Measurement and Evaluation in Physical Education
PE 8946 Physiology of Exercise
PE 8950 Advanced Exercise Physiology
PE 8966 Topics in Sports Medicine
RLS 8246 Recreation Administration I
RLS 8300 Recreation Programming
RLS 8346 Recreation Administration II
RLS 8420 Leisure Play and Human Development
RLS 8526 Therapeutic Recreation Intervention for the Aging
RLS 8536 Therapeutic Recreation for the Physically Disabled
RLS 8550 Clinical Internship in Therapeutic Recreation
RLS 8616 TR: Process and Procedure
RLS 8636 TR: Intervention and Facilitation Techniques
RLS 8646 Trends and Issues in Therapeutic Recreation
RLS 8656 Recreation and Sport Opportunities for the Physically Disabled

Course Descriptions
General HPER
8000 Special Studies (1-3) A series of intensive courses - scheduled as regular seminars or workshops according to purpose. Prereq: Permission of department.
8030 Research in Health, Physical Education and Recreation (3) The course deals with technical writing, research techniques, statistics and research design. Considerable emphasis is placed on the development of research proposals and techniques of critiquing research in scholarly publications. Prereq: Graduate student in HPER.
8100 Research Project (1-3) Individual or group study and analysis of specific problems in health, physical education or recreation. Prereq: Permission of instructor.
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. Prereq: Graduate.
8300 Analysis of Research and Literature in HPER (3) Survey of research and literature in HPER for the purpose of orienting the student to possible areas of research and developing an understanding of and appreciation for writings in HPER. Prereq: Graduate.
8990 Thesis (1-6) Independent research project written under the supervision of an adviser. Prereq: Permission.

Health Education
4200/8206 Health Promotion at the Workplace (3) A study of the practice of health promotion in the workplace. Principles of sound program planning, implementation and management will be explored. The student will study workplace health promotion in relation to cost analysis, health behavior, program content, the insurance industry and program evaluation.
4550/8555 Health Aspects of Aging (3) The study of psychological, sociological and physiological factors that influence the health of the aging; with particular emphasis given to biological changes that have implications for disease and health disorders. Prereq: Graduate.
8080 Topics in Health Education (3) This course will explore important current issues in Health Education. Students 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 student may enroll in HED 8080 as long as a different topic is offered each time. Prereq: Graduate.

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 students from the helping professions. Qualified students from other related disciplines must have permission of instructor.

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 techniques for alcohol education and prevention of alcohol problems in various sites, i.e., schools, worksites, public and voluntary health agencies.

8500 Health Behavior (3) The purpose of this course is to study the theoretical foundations of health behavior. Students 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. Prereq: Graduate.

8730 Thanatology (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. Prereq: None. (Same as GERO 8730)

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. Students will be introduced to current scientific research in human stress. Prereq: Graduate.

9980 Health Education Practicum (1-3) This course offers graduate students in health education an opportunity to gain practical, on-the-job training in health education in local schools, businesses, hospital/clinics, voluntary health agencies or governmental health agencies. Prereq: Twenty-one credit hours in health education (graduate or undergraduate).

Physical Education

3840/8845 Survey of Microcomputer Applications in Health, Physical Education & Recreation (3) This course is designed for students in Health, Physical Education and Recreation who have little or no previous experience with microcomputers. This course is oriented toward the application of computer technology within these fields. Prereq: None.

3860/8865 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. Prereq: None.

4010/8016 Laboratory Methods in Exercise Science (6) This course will provide students an opportunity to achieve competency in operating various pieces of equipment typically used in biomechanics and exercise physiology laboratories. The student will gain experience in interpreting the results of the tests administered and writing exercise prescriptions based upon those results. Prereq: Permission of Instructor.

4070/8076 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 multiyear training schedules. Prereq: None.

4170/8176 Motor Assessment and Prescription (3) A 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. Prereq: 4150.

8180/8186 Practicum in Physical Education for the Disabled Child (3) This course is designed as a practicum to provide the physical education pedagogy major or special education major enrolled in the Adapted Physical Education endorsement program with theoretical and practical experience in addressing the motor needs of young disabled children in a physical education setting. Prereq: PE 4170/8176 and permission of instructor.

4500/8505 Behavioral Aspects of Coaching Athletes (3) This course is designed to provide the graduate physical education student with an overview of the behavioral aspects of coaching athletes. The course will cover coaching as it affects skills, abilities and personalities of the elementary school, junior high school, high school, college and post-college athletes. Such personal factors as body build, intellectual attributes, emotions, competition, cooperation, morale, sportsmanship and leadership will be discussed in relation to the athlete. Practice factors that influence the athlete will be studied from a coaching standpoint. Research in sport will be reviewed. Prereq: Graduate.

4850/8856 Cardiac Rehabilitation Principles and Practices (3) The purposes of this course is to provide students with an introduction to the theories and practices involved in all phases of cardiac rehabilitation. Prereq: PE 2680, 4010/8016, 4500/8506.

4930/8935 Measurement and Evaluation of Physical Education (3) Analysis of tests, measurement apparatus and testing procedures used in physical education. Includes a review of basic descriptive statistics. Practical experience in test administration is provided. Prereq: For 4930, junior and PE 2430. (Spring, Summer)

4940/8946 Physiology of Exercise (3) A study of the major physiological systems of the human body and their response to exercise and the exercise programs. Includes application of physiological concepts to physical training and conditioning. Prereq: HPER 2800 or equivalent. (Summer, Fall)

4950/8956 Topics in Sports Medicine (3) This course covers selected topics regarding the science and medicine of sports participation. Some areas to be covered include pharmacologic aspects, orthopedic aspects, prevention and rehabilitation, pediatric aspects, legal aspects and aging. Prereq: Basic course in human anatomy, physiology, kinesiology, exercise physiology, psychology and growth and development or special permission of instructor.

8240 Sport in American Culture (3) The course is a study of sport and the ways in which it influences people in America.

8260 Supervision of Physical Education (3) Concepts, principles, organization and techniques of supervision for use by supervisors and teachers in the construction and supervision of programs in physical education.

8280 Curriculum in Physical Education (3) A study of the foundations for curriculum development and related educational problems. Special consideration is given to curriculum change, curriculum patterns and programs in physical education.

8370 Improvement of Instruction in Physical Education (3) An examination and discussion of current programs, content, methods and materials within physical education. Emphasizes the improvement of each individual's teaching in the physical education setting.

8400 Motor Learning and Performance (3) A study of conditions and factors which influence the learning and performance of motor skills with particular attention being given to those skills having relevance for the teacher of physical education.

8450 Kinesiological Analysis of Motor Skills (3) An investigation of the biomechanical basis of motor performance. Includes a descriptive analysis of sports skills and fundamental movement patterns and an examination of techniques for collecting biomechanical data.

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. Prereq: The student must be in his/her last semester of coursework and receive permission of internship coordinator.

8950 Advanced Exercise Physiology (3) This course is designed for students with an interest in exercise physiology. Major topics to be emphasized include: graded exercise testing and electrocardiography, kinetics of oxygen uptake, body composition, neuromuscular function and thermoregulation. Prereq: PE 4940 or equivalent.
Recreation and Leisure Studies

4240/8246 Recreation Administration I (3) Designed to provide a background of information on public, private and commercial recreation with special attention to organization, promotion, development from the administrative aspect. Prereq: At least nine hours of upper division courses in recreation or permission of instructor.

4300/8306 Recreation Programming (3) An advanced study of recreational programming and planning through practical application of research techniques with emphasis on understanding participant leisure behavior, participant leisure needs, and the ways in which organizations create services to respond to those leisure needs. Prereq: For 4300, recreation major or permission of instructor. For 8306, undergraduate recreation major/minor or permission of instructor.

4340/8346 Recreation Administration II (3) This course is designed to follow Recreation Administration I with special emphasis on strategies and skills required for financial management (budget planning/management, fees, charges and cost accounting) within the field of recreation, park resources and leisure services.

4520/8526 Therapeutic Recreation Intervention for the Aging (3) The purpose of this course is to introduce the student to the field of recreation for the aging in nursing homes and community-based recreation programs. The concentration focuses on the aging and their needs, and how proper recreation programming can help them meet some of their needs. A portion of the course involves students being placed in site leadership. Prereq: RLS 3500 or GER0 2000, or permission of instructor.

4530/8536 Recreation and Sport Opportunities for the Physically Disabled (3) An in-depth study of physical disabilities as related to therapeutic recreation settings; includes services, implications of disability, self-help skills, wheelchair sports and activities, rule modifications in competitive sports, safety concerns, legislation and adaptive techniques. Prereq: RLS 3500 or permission.

4610/8616 TR: Process and Procedures (3) This course is designed to examine, in-depth, the therapeutic recreation process, using a comprehensive and systematic TR service design. Prereq: RLS 3240, 3500, 4300.

4630/8636 TR: Intervention and Facilitation Techniques (3) This course is designed to offer students a full range of intervention strategies and facilitation techniques specific to special populations. Prereq: RLS 3240, 3500, 4300.

4640/8646 Trends and Issues In T.R. (3) This course covers selected topics reflecting current trends and issues in the field of therapeutic recreation. Prereq: RLS 3240, 3500, 4300.

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) student majors within recreation and leisure studies; scheduled as seminars or workshops, according to purpose. Prereq: Graduate.

8050 Seminar in Therapeutic Recreation (3) Seminars especially designed for therapeutic recreation majors within recreation and leisure studies and/or practitioners within therapeutic recreation and leisure services.

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 focus will be considered in relationship to the entire life span, and implications will be drawn for recreation and leisure services. Prereq: Graduate.

8560 Clinical Internship In Therapeutic Recreation (6) This course is structured as a full-time (40 hrs/wk/15 wks) fieldwork experience in Therapeutic Recreation. The student works under the supervision of a certified Therapeutic Recreation Specialist in an agency/hospital/institution setting. The nature of the placement and make-up of the clients/patients seen will vary with each individual student's professional objectives. Prereq: At least three upper division undergraduate and/or three graduate courses in therapeutic recreation and permission of instructor.
2. Fifteen semester hours of approved graduate courses following general patterns:

1. Twenty-four semester hours of approved graduate courses in History will be arranged to conform to one of the following patterns:

M.A. Program without Thesis (Option II)
1. Under this plan the student may earn a Master of Arts degree by completing successfully 36 hours of coursework, at least half of which must be earned in courses open only to graduate students. No more than six hours of credit may be taken by a student under courses numbered 8010.

2. In addition to showing broad competency in history, the candidate must give proof of research ability and proficiency in writing. This normally will be done in research seminars and independent research projects.

3. Although there is no requirement for a minor in some field other than history, the student may elect to take a minor in some related field, such minor to consist of no less than six graduate hours and no more than nine graduate hours. Permission to take such a minor shall be obtained from the student’s adviser and the minor department must be consulted to determine the student’s eligibility to do graduate work in that department.

4. Whether or not the student elects a minor in an outside field, he/she shall maintain a reasonable balance between American and non-American fields in history.

5. The Graduate Program Chairperson or any graduate faculty member of the Department of History may serve as adviser to a non-thesis program student.

In either program of study, a thesis carrying six hours of credit is required. The thesis is done under the direction of a major adviser and supervisory committee in keeping with procedures outlined in this Catalog.

M.A. Program with Thesis (Option I)

The program for the Master of Arts degree (Option I) with a major in History will be arranged to conform to one of the following general patterns:

1. Twenty-four semester hours of approved graduate courses in History, nine of which must be in seminars (HIST 9100). At least three of the remaining 15 hours must be an additional graduate seminar, or HIST 8010 (Advanced Research Project in History). However, a student’s program may not include more than six hours of work in HIST 8010. The remainder of the coursework may be in lecture classes open to both graduate and undergraduate students. A balance of 15 and nine hours must be maintained between American and non-American history courses (15 American and nine non-American or 15 non-American and nine American.)

2. Fifteen semester hours of approved graduate courses in History including nine hours of seminars, plus nine approved hours of graduate coursework in a related field, such nine hours constituting a graduate minor. At least three hours of the minor or 12 hours of the history major must be in courses open only to graduate students. The minor department must be consulted to determine the student’s eligibility to do graduate work in that department.

PROCEDURE FOR COMPREHENSIVE EXAMINATION FOR NON-THESIS MASTER OF ARTS CANDIDATES IN HISTORY

1. Early in the semester the candidate expects to take the degree, he/she must make arrangements with his/her sponsor to take the comprehensive written examination. The examination will be given three times during the year: during the eleventh week of the fall semester, during the eleventh week of the spring semester, and during the second week of the first summer session.

2. The examination in history will consist of two parts, one devoted to the major area, and one to the minor area of study.

a. If the major area of study is European/English history, the examination will be comprehensive, taking into consideration the student’s program of study. The non-European/English portion of the examination will be over the specific courses taken for the minor. The major area examination will be of six hours duration (two three-hour segments), and the minor area examination will be of three hours duration.
Course Descriptions

3130/8135 American Colonial History (3) A study of the background, settlement and development of the English colonies. Prereq: For 3130, junior or permission of instructor.

3160/8165 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. Prereq: For 5160, junior or permission of instructor.

3330/8335 American Diplomatic History (3) A history of the foreign relations of the United States. Prereq: For 3330, junior or permission of instructor.

3410/8415 History of Nebraska (3) From the earliest known records to the present. Prereq: For 3410, junior or permission of instructor.

3440/8445 History of The South (3) Economic, social and political development of the south as a region. Prereq: For 3440, junior or permission of instructor.

3530/8535 Medieval Europe (3) An examination of medieval European history with emphasis upon social and economic developments. Prereq: None.

3640/8645 History of the British Empire and Commonwealth (3) Britain in America, Africa, India and the Pacific. The development of a dependent empire and transformation into independent nations. Prereq: None.

3710/8715 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. Prereq: Junior or permission.

3910/8915 Topics in History (3) A pro-seminar on selected topics based on a consideration of interpretive historical writings and/or source materials. Prereq: Permission of instructor.

4060/8066 History of Women in the United States (3) This course discusses the history of women in 19th and 20th century America from the Seneca Falls convention to the present. It includes the study of feminist theorists and activists, female educational/professional and employment opportunities, current status of women and the New Feminism of the 1970s. Prereq: Junior or permission of instructor.

4120/8126 American Social and Intellectual History Since 1865 (3) Primarily an analytical approach to American history, this course will examine significant topics in American thought and society. Prereq: For 4120, junior or permission of instructor.

4130/8136 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. Prereq: For 4130, junior or permission of instructor.


4180/8186 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. Prereq: For 4180, junior or permission of instructor.

4240/8246 The Emergence of Modern America: 1777-1901 (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. Prereq: For 4240, junior or permission of instructor.

4270/8276 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. Prereq: For 4270, junior or permission of instructor.

4280/8286 Twentieth Century America Since 1932 (3) A study of the history of the United States since the election of Franklin D. Roosevelt to the presidency in 1932. Prereq: For 4280, junior or permission of instructor.

4330/8336 Constitutional History of the United States to 1860 (3) A history of constitutional theory and practice to 1860. Prereq: For 4330, junior or permission of instructor.

4340/8346 Constitutional History of the United States Since 1860 (3) A history of constitutional theory and practice since 1860. Prereq: For 4340, junior or permission of instructor.

4400/8405 History of North American Indians (3) A survey of traditional North American Indian cultures, their contact with transplanted European peoples, and the continuing problems faced today. Prereq: For 4400, junior or permission of instructor.

4430/8436 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. Prereq: For 4430, junior or permission of instructor.

4470/8476 History of 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. Prereq: For 4470, junior or permission of instructor.
4510/8516 Intellectual History of Modern Europe from the Renaissance to the French Revolution (3) A study of enduring political, religious, economic, scientific and philosophical ideas in their historical settings. Prereq: None.

4520/8526 Intellectual History of Modern Europe from the French Revolution to the Present (3) A study of leading political, religious, economic, scientific and philosophical ideas in times of extraordinary social change. Prereq: None.

4530/8536 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 Tridentine Catholicism. Prereq: For 4530, junior or permission of instructor.

4550/8556 The Age of Enlightenment (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. Prereq: For 4550, junior or permission of instructor.

4560/8566 The French Revolution and Napoleonic Era: 1789-1815 (3) A study of the French revolution and the Napoleonic era with particular attention to the development of democratic practice concurrently with the development of modern authoritarianism. Prereq: For 4560, junior or permission of instructor.

4570/8576 Europe Betrays Its Promise (1815-1890) (3) A study of reform and reaction which resulted in the Balkanization of Europe.

4580/8586 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. Prereq: None.

4590/8596 English History: From Empire to Welfare State (3) A study of the change and development in Great Britain from the late 18th century to 1918.

4610/8616 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. Prereq: None.

4670/8676 Europe in Crisis: 1890-1932 (3) A study of the conditions and forces immediately preceding World War I, the war itself, the peace following the war and the rise of the modern dictatorships. Prereq: For 4770, junior or permission of instructor.

4780/8786 Europe in the Global Age: 1933 to the Present (3) A study of the ever increasing tensions between the Fascist and Communist dictatorships and the Western democracies, World War II, the resultant dislocation of power and the emergence of the balance of terror. Prereq: For 4780, junior or permission of instructor.

8010 Advanced Research Project in History (1-5) Special problems in advanced research in history, arranged individually with graduate students. There is a 6-hour limit for both the thesis and non-thesis programs: Prereq: Fifteen graduate hours (including two seminars), permission of instructor.

8990 Thesis (1-6) Thesis research project written under supervision of an adviser.

9100 Seminar in History (3) Readings and research in selected topics of history.
MATHEMATICS

ADMISSION REQUIREMENTS FOR THE M.S. OR M.A. DEGREES

Admission to a degree program is based on evidence of ability to successfully complete the requirements for the program.

1. For unconditional admission with a concentration in Mathematics, an applicant should:
   a. Have completed a Bachelor's degree with an overall average of 3.0 or better.
   b. Have completed 15 credit hours of mathematics courses beyond calculus, including MATH 3230/8235 Introduction to Analysis or equivalent.

MASTER OF ARTS FOR TEACHERS OF MATHEMATICS (M.A.T.)

To obtain the M.A.T. degree, the student must complete 36 credits as follows:

1. Complete the following required Mathematics courses: MATH 8105, 8235, 8036, 8020 and 8040.
2. Complete three approved education courses for graduate students only (nine credits), one of which must involve the use of microcomputers in the classroom.
3. Complete one approved course for graduate students only (three credits) in Mathematics or Education.
4. Choose one of the following three options (nine credits):
   a. Statistics option: STAT 8005, 8015, MATH 8010...
   b. Mathematics option: three courses in mathematics with a number of 8000 or above, but excluding any one whose last digit is "5."
   c. Computer Science option: three courses in computer science with the number of 8000 or above.
5. Pass the M.A.T. comprehensive examination which is composed of two parts.
   a. The Mathematics part is four hours in length and covers the courses MATH 8105, 8235, 8036, 8020 and 8040. The examination consists of two questions from each of the five courses and the student is required to do eight of the 10 questions.
   b. The Education part of the examination is two hours in duration and covers all the education courses which the student has taken for the degree. A student must pass both parts in order to pass the examination.

ADMISSION REQUIREMENTS FOR THE M.A.T. DEGREE

A student meeting the following conditions may be admitted to the M.A.T. degree program:

1. Have taken CSCI 1610 or equivalent.
2. Hold state certification for teaching secondary school mathematics.
3. Have at least a "B" average in previous mathematics courses, including two courses beyond elementary calculus.
Financial Support
The Mathematics and Computer Science Department annually awards eight graduate assistantships. These positions pay an annual stipend of approximately $6300 plus waiver of tuition. The Mathematics assistantships require 20 hours per week work in the Mathematics laboratory during the fall and spring semesters. The Computer Science assistantships require 20 hours per week work under the supervision of a Computer Science faculty member.

International students must be in residence at UNO for at least one semester before being eligible for a teaching assistantship. This is to ensure satisfactory verbal skills in English.

Course Descriptions
3100/8105 Applied Combinatorics (3) Basic counting methods, generating functions, recurrence relations, principle of inclusion-exclusion, Polya's Theorem. Elements of graph theory, trees and searching, network algorithms. Prereq: MATH/CSCI 2030. (Same as CSCI 3103/8105)

3230/8235 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. Prereq: MATH 1970 and MATH/CSCI 2030. Recommended: MATH 3350.


3300/8305 Numerical Methods (3) Solving equations and systems of equations, interpolation, numerical differentiation and integration, numerical solutions to ordinary differential equations, numerical calculations of eigenvalues and eigenvectors, analysis of algorithms and errors, computational efficiency. Prereq: MATH 1960, MATH/CSCI 2050. Recommended: MATH 3350. (Same as CSCI 3305)


3360/8365 Differential Equations II (3) Vector analysis, line and surface integrals, Fourier series, separation of variables for partial differential equations, wave equation, heat equation, Laplace equation. Prereq: MATH 3350/8355, MATH 1970.

3500/8505 Selected Topics in Mathematics (1-6) This is a variable credit 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 9 hours. Mathematics majors may apply no more than 3 hours of MATH 3500 toward the minimum major requirements. MATH 8505 does not apply to M.A. or M.S. in mathematics. Prereq: Permission of instructor.

3640/8645 Modern Geometry (3) Axiomatic systems, finite geometries, modern foundations of Euclidean geometry, hyperbolic and other non-Euclidean geometries, projective geometry. Prereq: MATH 1960 and MATH/CSCI 2030, or equivalent.


4230/8305 Applied Modern Algebra (3) Review of sets, relations and functions, Semigroups, groups, rings and fields, lattices and Boolean algebra. Applications include coding theory, linear machines and finite automata. Prereq: MATH/CSCI 2030. Recommended: MATH/CSCI 2050 and 3100/8105.

4110/8116 Abstract Algebra (3) Advanced undergraduate (beginning graduate) course in abstract algebra to include congruences, axioms for number systems, group axioms, group theory, homomorphisms, isomorphisms, quotient groups, and introduction to rings, integral domains, and fields. Prereq: MATH 3350/8355 or permission of instructor.

4120/8126 Abstract Algebra II (3) Advanced undergraduate (beginning graduate) course in abstract algebra to include rings, integral domains, fields, vector spaces, ideals, and algebraic number fields. Prereq: MATH 4110/8116.

4150/8156 Graph Theory and Applications (3) Introduction to graph theory. Representations of graphs and graph isomorphism. Trees as a special case of graphs. Connectivity, covering matching and coloring in graphs. Directed graphs and planar graphs. Applications of graph theory in several fields such as networks, social sciences, VLSI, chemistry and parallel processing. Prereq: CSC/MATH 2050 or permission of instructor. (Same as CSCI 4150/8156)

4230/8236 Mathematical Analysis I (3) Provides a theoretical foundation for the concepts of elementary calculus. Topics include differentiation and Riemann integration in R, Riemann-Stieltjes integration, sequences and series of functions, uniform convergence, power series, Stone-Weierstrass Theorem, functions of several variables, Implicit Function Theorem, special functions. Prereq: MATH 4230/8236.

4270/8276 Complex Variables (3) Differentiation, integration and power series expansions of analytic functions, conformal mapping, residue calculus, and applications. Prereq: MATH 3230/8235 or equivalent.

4300/8306 Linear Programming (3) Convex sets, hyperplanes, polytopes, mathematical modeling, formulation and geometry of linear programming, Primal simplex method, dual simplex method, revised simplex method, sensitivity analysis and problem solving using computer packages. Prereq: MATH/CSCI 2050. (Same as CSCI 4300/8306)

4310/8316 Discrete Optimization (3) The mathematical foundations and solution algorithms of discrete optimization problems including transportation problems, network problems, and integer programming. Prereq: MATH/CSCI 2050, MATH/CSCI 4300/8306. (Same as CSCI 4310/8316)


4410/8416 Introduction to the Foundations of Mathematics (3) Logic, the axiomatic method, properties of axiom systems, set theory, cardinal and ordinal numbers, metamathematics, construction of the real number system, historical development of the foundations of mathematics, recent developments. Prereq: Senior or graduate.

4510/8516 Theory of Numbers (3) Congruences, quadratic reciprocity, diophantine equations, continued fractions and prime number distribution. Prereq: Junior or senior.

4600/8606 Tensor Analysis (3) A review of vector analysis and matrix theory, the tensor concept, matrix tensor, Christoffel symbols, Riemann-Christoffel concept, tensors to geometry, classical mechanics, and relativity. Prereq: MATH 1970, 2050 and 3350.

4610/8616 Elementary Topology (3) Sets and functions, metric spaces, topological spaces, continuous functions and homeomorphisms, connectedness, compactness. Prereq: MATH 3230/8235 or equivalent.

4650/8656 Operational Mathematics (3) Laplace transformation inversion integral, other integral transforms, and applications in partial differential equations, mechanical vibrations, electrical circuits, heat conduction. Prereq: MATH 3230/8235 and 4110/8115.

4660/8666 Automata, Computability and Formal Languages (3) This course presents a sampling of several important areas of theoretical computer science. Definition of formal models of computation, and important properties of such models, including Finite Automata and Turing machines. Definition and important properties of formal grammars and their languages. Introduction to the formal theories of computability and complexity. Prereq: MATH/CSCI 2050. Recommended: CSCI 3320. (Same as CSCI 4680/8666)

4760/8766 Stochastic Modeling (3) Examination and construction of various probabilistic models including Markov chains, Poisson Processes, renewal theory and queuing systems. Prereq: MATH 3740/8745. (Same as CSCI 8766)

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.) Prereq: STAT 6015 and TED 6010.

8020 Topics in Geometry and Topology (3) Selection from the following topics: Straight line and compass constructions; geometries and transformations - complex numbers and stereographic projection, non-Euclidean geometries; graph theory; topology of the plane; two-dimensional manifolds, theory of dimension. (This course will not count toward a major in the MA, or M.S. programs.) Prereq: Secondary teacher certification or working toward it, or permission of instructor.

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. Prereq: Teacher certification or working toward it, or permission of instructor.

8160 Algorithmic Graph Theory (3) Review of the basic concepts of graph 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. Prereq: CSCI 3320/8325 and MATH/CSCI 4100/8106 or permission of instructor. (Same as CSCI 8160)

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. Prereq: MATH 4230/8236 or 4320/8326.

8350-8360 Theory of Analytic Functions (5) Semester I: complex numbers, analytic and elementary functions, complex integrations. Semester II: calculus of residues, entire and meromorphic functions, normal families and conformal mappings. Prereq: MATH 4230, 4240 or equivalent.

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. Prereq: MATH 3230/8235 and 3350.

8500 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. Prereq: MATH 4270/8276.

8620 General Topology (3) The concepts of MATH 4160/8166 are studied at an advanced level in conjunction with ordinals and cardinal numbers, open and closed maps, separation axioms and countable compactness. Prereq: MATH 4160/8166 or permission of instructor.

8650 Introduction to Probability Models (3) An introduction to probability modeling including Poisson Processes, Markov chains, birth-death processes, queuing models and renewal theory. Applications will be an important part of the course. Prereq: MATH 3740 or MATH/CSCI 4780 or STAT 3800.

8670 Algorithmic Combinatorics (3) Classical combinatorial analysis, graph theory, trees, network flow, matching theory, extremal problems, block designs. Prereq: MATH/CSCI 3100/8105. (Same as CSCI 8670)

8680 Advanced Automata and Formal Languages (3) A continuation of MATH/CSCI 4690/8666. 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. Prereq: MATH/CSCI 4690/8666. (Same as CSCI 8680)

8710 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. Prereq: CSCI 3320/8325 or equivalent. (Same as CSCI 8710)

8810 Advanced Numerical Methods I (3) Error propagation, solutions of linear equations by various schemes, Matrix norms and conditioning, computation of eigenvalues and eigenvectors. Additional topics such as non-linear systems, least square problems, etc. Prereq: MATH/CSCI 3300/8305. (Same as CSCI 8810)

8910 Advanced Numerical Methods II (3) Interpolation and approximation, power series and ecmification, iterative factoring of polynomials, solution of non-linear equations, solutions of ordinary and partial differential equations, and gradient vector techniques. Prereq: MATH/CSCI 8810 and MATH 1970. (Same as CSCI 8910)

9100 Advanced Topics in Optimization (3) Topics selected from dynamic programming, multi-objective optimization, optimization in vector spaces, optimal management in bioeconomics, and optimal control. May be repeated for credit with the permission of graduate adviser and instructor. Prereq: MATH/CSCI 4300/8305 or 4310/8316, and MATH 3230/8235 or permission of instructor. (Same as CSCI 8910)

970 Independent Graduate Studies (3) Under this number a graduate student may pursue studies in an area that is not normally available to him in a formal course. The topics studied will be a graduate area in mathematics to be determined by the instructor. Prereq: Permission of instructor and graduate.

9800 Graduate Seminar (1-3) A graduate seminar in mathematics.

9900 Thesis (3-6)

9110 Advanced Topics In Applied Mathematics (3) Topics selected from applied algebra, applied linear algebra, coding theory, graph theory, differential equations, numerical analysis, etc. May be repeated for credit with permission of the graduate adviser. Prereq: Permission of Instructor.

9230 Theory of Function of Real Variables (3) Real number system, convergence, continuity, bounded variation, differentiation, Lebesque-Stieljes integration, abstract measure theory, the Lp spaces. Prereq: MATH 4230/8240 or advanced calculus.

Statistics

3000/8005 Statistical Methods I (3) Distributions: introduction to measures of central value and dispersion: population and sample; the normal distribution; inference: simple population, inference: two populations; introduction to analysis of variance. Statistical packages on the computer will also be utilized in the course. Prereq: MATH 1310 or equivalent.

3010/8015 Statistical Methods II (3) Regression and correlation, analysis of covariance, chi-square type statistics, more analysis of variance, questions of normality, introduction to non-parametric statistics. Statistical packages are used when appropriate. Prereq: STAT 8005 or equivalent.
Entrance Requirements for Admission to the Graduate Program in Music

Applicants must have earned a baccalaureate degree in Music from a recognized institution of higher education. The student must have a cumulative average of 3.0 or better GPA (on a 4.0 scale) in all music courses or a 3.0 or better GPA in all upper division music courses. If the student does not meet either of the 3.0 GPA requirements, he/she will not be admitted into the program. An applicant who meets only one of the 3.0 GPA requirements (overall or upper division) must take the Music Department Diagnostic Exam before he/she can be admitted and may need to complete undergraduate courses to satisfy any deficiencies that the diagnostic exam might indicate.

Master of Music

The Department of Music offers graduate courses in the areas of music education, performance, history and theory. The degree requires a total of 30 or 36 hours credit for completion, and may include a program in either performance or music education.

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<th>REQUIRED MUSIC PERFORMANCE</th>
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<td>Treatise .................... 3</td>
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<td>Special Topics or Electives** 9</td>
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Total Semester Hours .......... 30 hours

* A portion or all of the elective hours may be in a related subject field.

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<th>REQUIRED MUSIC EDUCATION</th>
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<td>Electives in Music** ...... 6</td>
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Option A: Thesis ............. 6

Option B: Additional Hours** 12

Total Semester Hours .......... 30-36 hours

* Upon petition to the Graduate Committee in Music one pedagogy course may be substituted for only one of these courses.

** To be selected from the following areas: conducting, performance, pedagogy or literature.

*** A portion or all of these hours may be elected in related subject fields outside of music.
4670/8676 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. Prereq: MUS 4660/8660.

4710/8716 Acting for Music Theater (3) This course is a study of theoretical and practical approaches essential to developing the "singer/actor." Prereq: Music or drama major, permission of instructor.

4720/8726 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. Prereq: MUS 2570, 3640, and graduate.

4730/8736 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. Prereq: Permission of instructor.

4740/8746 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. Prereq: Junior voice or permission of undergraduate instructor. Graduate voice or permission of graduate instructor.

8200-8390 Applied Music (1 or 3) Elective level for graduate students in the music education track for one credit hour. May be repeated. Required for graduate students in the performance track for three credit hours. To be repeated one time. Prereq: Audition and permission.

8200 Guitar (1-3)
8210 Piano (1-3)
8220 Voice (1-3)
8230 Violin (1-3)
8240 Viola (1-3)
8250 Violoncello (1-3)
8260 Bass Viol (1-3)
8270 Flute (1-3)
8280 Oboe (1-3)
8290 Clarinet (1-3)
8300 Bassoon (1-3)
8310 Saxophone (1-3)
8320 Trumpet (1-3)
8330 French Horn (1-3)
8340 Baritone Horn (1-3)
8350 Trombone (1-3)
8360 Tuba (1-3)
8370 Pipe Organ (1-3)
8380 Percussion (1-3)
8390 Harp (1-3)

8450 Analytical Techniques (3) This course will study the major theoretical techniques developed by such important figures as Schenker, Hindemith, Reilly and Forre. Music of all styles will be subject for analysis, but emphasis will be on tonal early 20th century music. Prereq: Graduate and MUS 3400 and 4440 or equivalents.

8510 Performance Practice (3) This course includes a study of published materials, master classes and workshops with visiting artists and intensive performance by the students themselves. Graduate students will not only be expected to join in an intensive study of a particular genre and period, but also to complete a lecture-recital on a specific approved topic. Prereq: Admission to the Graduate College and permission.

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. Prereq: Graduate and permission.

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. Prereq: None.

8620 Seminar-Workshops In Music Education (1-3) Seminars and workshops in music and music education for the graduate student and in-service teacher. Prereq: Permission.

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. Prereq: Graduate and permission.

8640 Philosophical and Sociological Aspects of Music Education (3) A study of philosophical and social backgrounds of music education through attention to philosophies of art and to current sociological trends. Prereq: Graduate.

8650 Psychological and Historical Aspects of Music Education (3) A study of psychological and historical aspects of music education through attention to relevant topics in the psychology of music and learning theory and through relevant reading in the history of music education. Prereq: Graduate.

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. Prereq: Graduate and permission of instructor.

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. Prereq: Students with a choral emphasis, MUS 3640 and 3670. Students with an instrumental emphasis, MUS 3630 and 8630.

8750 Advanced Instrumental Conducting (3) Study of advanced conducting problems in band and orchestral literature and techniques for their solution. Prereq: MUS 2600 and 3630 or 3640 or equivalent.

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. Prereq: MUS 2600 and 3640 or equivalent.

8770 Treated (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. Prereq: A written proposal for the written project must be approved by the appropriate departmental committee.

8990 Recital (3) 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.

8990 Thesis (3) This purpose of this course is to allow graduate students in Music Education (Option I) to develop a substantive thesis which employs and reflects 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". Prereq: Permission of Graduate Committee and twenty-four (24) hours of graduate course work completed.
POLITICAL SCIENCE

PROFESSORS:
Camp, Kiwan, Menard

ASSOCIATE PROFESSORS:
Bacon, Chung, Farr, J. Johnson, B. Kolasa

Admission Requirements
An applicant for admission to the Master of Arts or Master of Science program will not be accepted at this time. In concurrence with the Graduate College, a moratorium has been placed on the acceptance of such applications, effective January 1, 1989. Applicants who are interested in graduate coursework in Political Science without a degree objective may apply for Unclassified status.

Course Descriptions
4200/8206 The Presidency (3) The rise of the institution from Washington to the present, to the position and prestige it holds and how the president uses this power and prestige to influence Congress, the courts and the public. Prereq: For 4030, PSCI 1100 and junior.
4200/8208 The Legislative Process (3) A comprehensive study of the legislative process of the Congress and state legislatures. The major emphasis is on legislative institutions, processes and behavior. Prereq: For 4040, PSCI 1100 and junior.
4200/8208 The Judicial Process (3) A study of the administrative processes of the judicial branch and the courts. Prereq: For 4050, PSCI 1100 and junior.
4210/8212 Public Opinion and Political Behavior (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. Prereq: For 4126, junior.
4210/8218 Constitutional Law: The Federal System (3) Analytical study of American constitutional law regarding the relations of nation and state (Federalism) and the powers of the national government (Judicial, Congressional and Executive).
4210/8216 Constitutional Law: Civil Liberties (3) Analytical examination of American constitutional law as it pertains to civil liberties. Emphasis on 1st, 4th, 5th, 6th, 8th, 9th, 13th, 14th and 15th Amendment cases.
4220/8226 International Politics of Asia (3) Analysis of contemporary relations among the Asian nations as well as their interactions with the great powers; emphasis on the forces and issues which influence the international system of Asia. Prereq: For 4200, junior.
4210/8216 Foreign Policy of the U.S.S.R. (3) A study of the foreign policy of the U.S.S.R., with emphasis on developments since 1945. Internal and external influences on Soviet foreign policy, the processes of foreign policy making, and the relations among members of the communist camp also will be considered. Prereq: For 4210, junior.
4220/8226 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. Prereq: For 4280, junior.
4310/8316 Political Philosophy I (3) Textual analysis of leading works of classical political philosophy: Plato and Aristotle. Prereq: For 4310, junior.
PROFESSIONAL ACCOUNTING

PROFESSORS:
Buehlmann, Garsombke, Trussell
ASSOCIATE PROFESSOR:
Ortmann
ASSISTANT PROFESSORS:
File, Watanabe

Objectives of the MPA Program

The primary objective of the Master of Professional Accounting degree program is to provide a graduate-level educational experience as a basis for a career in professional accounting. Students with or without undergraduate degrees in accounting may be admitted to this program. The program provides a broad-based preparation for individuals seeking careers in public, private or not-for-profit organizations. By choosing specific elective courses, however, individuals desiring a particular career path may pursue some specialization.

The MPA 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. It requires an intensive analysis of the accounting discipline. Upon completion of the program, the student will have the educational prerequisites for the following professional examinations: Certified Public Accountant (CPA), Certificate in Management Accounting (CMA), and Certified Internal Auditor (CIA).

Program of Study

The first year of the MPA program focuses on the Common Body of Knowledge as defined by the AACSB and sufficient undergraduate accounting preparation to pursue graduate education. These courses may be waived upon satisfactory evidence of prior preparation. In the second year, students complete a core of required courses in accounting and the supporting disciplines. In consultation with an adviser, electives may be selected to meet a student's specific career goals. The program requires a professional report based on independent research.

Admission Requirements

All applicants must meet the requirements of the Graduate School as stated in the Graduate Catalog. Applicants must submit a completed application, official copies of all transcripts and results of the Graduate Management Admission Test (GMAT) prior to admission to the program. Although other factors are considered, the general admission formula is:

\[ \text{GMAT} (\text{minimum} 500) + (200 \times \text{Upper Division GPA}) = 1120 \]

Foreign students must provide letters of recommendation, statements of financial independence, and evidence of ability to speak and write the English language. The baccalaureate degree must have been received from an institution accredited by the proper accrediting agencies.
C. Required Tool Courses – 9 hours
BSAD 8000 Quantitative Analysis or
3-hour course in Research Methods***
BSAD 8010 Legal Environment of Management
One course from the following:
BSAD 8720 Systems Analysis and Design
BSAD 8730 Decision Support Systems
BSAD 8740 Data Base Management

D. Other Electives – 6 hours
In consultation with the MPA director, six (6) hours of additional graduate work must be selected from accounting or business courses that are not numbered "- - 6."

E. Other Requirements
1. A maximum of six (6) hours of "- - 6" courses may be included in the graduate program of study.
2. All Foundation courses must be completed with a minimum grade of "C" before registering for graduate courses.
3. Students also are subject to all policies and procedures of the Graduate College as stated in the Graduate Catalog.

*All courses are three semester hours.
**The content of this course will change with each offering so that it may be repeated up to nine (9) hours.
***Recommended Research Methods courses include ECON 8290, BSAD 8020, PSYCH 9090, PA 8000, SOC 8030.

Course Descriptions
4030/6036 Tax Issues for Decision-Making (3) An introduction to the basic taxation principles for the non-accountant. This course is designed to elevate the tax awareness of and to provide tax knowledge for future decision makers. Prereq: ACCT 4020 or equivalent or BSAD 8110.
4040/6046 Federal Taxation of Corporations and Partnerships (3) Analysis of the fundamental areas involved in the federal income taxation of corporations, corporate shareholders and partnerships. Prereq: ACCT 3020 or equivalent.
4070/6076 Accounting for Not-for-Profit/Governmental Organizations (3) A study of the budgeting process, accounting techniques, reporting requirements and the financial operating characteristics of not-for-profit and governmental organizations. Prereq: ACCT 3020.
4090/6096 Advanced Auditing (3) Professional standards and practice issues are studied. Auditor responsibilities, evidence gathering and evaluation, and reporting obligations are described. Prereq: ACCT 4080.
8220 Federal Estate and Gift Taxation (3) Analysis of the federal income taxation of estates, trusts and their beneficiaries; wealth transfer taxes, basic concepts of international taxation and other business-related taxes. Prereq: ACCT 3020 or equivalent.
8230 Controllership (3) An analysis of the concepts and techniques of the controllership function with emphasis on tactical and strategic planning and control. Prereq: ACCT 3050 and DSCI 2130.
8240 Professional Problems (3) Questions, problems and cases are used to develop and refine accounting analysis techniques and written communication abilities. Prereq: LAWS 3230; ACCT 3020, 3050, 4010, 4080; and permission of instructor.
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. Prereq: Admission to the MPA program and permission of instructor.
8260 Tax Research and Planning (3) This course is designed to supply students with a working knowledge of the methodology applied in solving both routine and complex tax problems. Familiarity with the techniques will be gained through text, material, journal articles and actual application. Prereq: ACCT 3020 or its equivalent and graduate.
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. Prereq: Admission to MPA program and approval of written proposal.
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. Prereq: Permission of instructor.
PSYCHOLOGY

PROFESSORS:
Becker, Deffenbacher, Hamm, Hendricks, LaVoie, Millimet, Newton, Pedrinl, G. Simpson, Wilkoff, R. Woody

ASSOCIATE PROFESSORS:
Finkler, French, Hansen, Harrison, Thomas

ADJUNCT FACULTY:
Carney, Collamer, Daly, Jasteadt, Kassler, Langner, Madison, Nef, Roberts, Strider

COURTESY FACULTY:
Abbott, Angel, Epps, Evans, Liebowitz, Rodriguez-Sierra

Admission Requirements
A minimum of 15 undergraduate semester hours of psychology courses including basic statistics and an upper level laboratory course emphasizing the experimental method, data collection, statistical analysis, and report writing; Graduate Record Examination scores on the Verbal, Quantitative, and Analytical sections are required for admission. An admission decision will not be made without these scores. The Advanced GRE score in Psychology is highly recommended, although this test score is not required for admission to the Master's program. The Advanced GRE in Psychology is required of students who are applying for a graduate assistantship and/or the Ph.D. program. A score of 600 on the Advanced GRE is required for passing one part of the comprehensive examination and may be achieved at any time (either before or after admission).

The evaluation of admission for all students applying to the Master's program is based primarily on a numerical composite score obtained by combining the last two years of the overall undergraduate GPA (and any graduate coursework completed since graduation) with the average of the three subtests composing the Aptitude portion of the GRE divided by 100. A student is admitted if his or her composite score is 8.0 or greater. If a student's GRE average for the three subtests is less than 500, the student will be on provisional admission for the first 12 credit hours of his/her program. A student whose composite score fails below 8.0 is not likely to be admitted and should be discouraged from applying.

Three letters of recommendation and a statement of goals and objectives are required for some programs.

Comprehensive Examination
Master's Degree Program
The comprehensive examination must be completed before a student can enroll for thesis credit or form a thesis committee. The examination for the Master of Arts and Master of Science degrees consists of two parts:

1. The advanced GRE subject test in Psychology on which the student must score at least 600. This test is administered several times each year and the test booklets are available at the Office of Graduate Studies.

2. Completion of the required four proseminars (one from each proseminar group) with a grade of "B" or higher in each proseminar.

Master of Arts
To complete the M.A. degree with a major in psychology, the student must present 30 hours of graduate coursework in psychology, or 21 hours in psychology plus nine (9) hours in a related minor field. Six (6) hours of thesis credit are to be included in this total.

The student must choose one course from each of the following four groups. These courses must be completed within the first 16 hours of graduate work.

1. a. PSYCH 9040 (Proseminar in Learning)
   b. PSYCH 9560 (Proseminar in Development)

2. a. PSYCH 9210 (Proseminar in Perception)
   b. PSYCH 9230 (Proseminar in Physiological Psychology)

3. a. PSYCH 9100 (Proseminar in Analysis of Variance)
   b. PSYCH 9110 (Proseminar in Regression and Correlation)

4. a. PSYCH 9430 (Proseminar in Personality)
   b. PSYCH 9440 (Proseminar in Social Psychology)

The student must earn a grade of at least "B" in the four required proseminars. If either a "C" is earned, or an unexcused withdrawal ("W") is recorded in a proseminar, this course or its pairmate must be retaken and completed with a grade of "B" or better. Should two such grades ("C" and/or "W") in one or more proseminars become a matter of record at any point in time (even if the initial "C" or "W" has been improved upon subsequently) the student will be dismissed from the program. The rule applies to the proseminar series only. However, the accumulation of any three "C's" or a "D" or an "F" in any graduate course on the student's plan of study will also result in dismissal. A dismissed student may appeal to the Graduate Program Committee for consideration of readmission.

The remainder of the student's coursework is elective but must be planned in conference with the academic adviser in order to meet the individual's needs and interests. Psychology 8000 is a non-credit course intended to familiarize the beginning graduate student with the profession of psychology and is required of all graduate students in psychology. The student may emphasize one of the following areas: quantitative, physiological, general experimental, social, personality, developmental, educational and industrial/organizational psychology. Final determination of a student's plan of study always resides with the adviser and the department. To meet the graduate college requirements, a student must take at least half of the work in courses which are open only to graduate students.

Master of Science
To complete the M.S. with a major in industrial/organizational psychology or the M.S. with a major in
educational psychology, the student must present 36 hours of graduate coursework in psychology. The M.S. degree has the same pro-seminar requirement as the M.A., and all rules concerning pro-seminar courses are the same in both degree programs, as well as the requirement of Psychology 8000.

Required courses additional to the pro-seminars may be designated by the department. This will ordinarily include up to three hours of practicum credit. Final determination of a student's plan of study always resides with the adviser and the department. To meet the graduate studies requirements a student must take at least half of the work in courses which are open only to graduate students.

Specialist In Education
The Ed.S. degree requires completion of 66 graduate hours including those taken for the Master's degree. The requirements for this degree are the same as those leading to certification as a School Psychologist with one additional. The degree candidate must write and defend a field project which deals with research or supervised experience in the area of school psychology.

Doctor of Philosophy
Through a cooperative program with the University of Nebraska-Lincoln, programs are offered in Omaha leading to the Ph.D. in industrial/organizational, experimental child, and in developmental psychobiology. Students may be considered for admission to a doctoral program if they have completed or are doing excellent work toward their Master's degree which includes a demonstration of research skills, preferably in the form of a defended thesis. There is no generally specified language or research skill requirement, but each student is expected to demonstrate proficiency in languages, research skills or knowledge in collateral research areas appropriate for the student's research interests as determined by the Supervisory Committee.

Industrial/Organizational Psychology
Doctoral students in this program are required to complete the entire pro-seminar series of eight courses as outlined above or their equivalent if the student has completed graduate coursework at another school. In addition, the following courses are required: Theory of Measurement and Design, Multivariate Statistical Analysis, Industrial Motivation and Morale, Industrial Training and Development, Criterion Development and Performance Appraisal, Personnel Section, Practicum in Organizational Behavior and Dissertation. The remaining hours of coursework are determined by the student and the supervisory committee.

Experimental Child Psychology
Doctoral students in this program are required to complete the entire pro-seminar series of eight courses as outlined above or their equivalent if the student has completed graduate coursework at another school. In addition, the following courses are required: Memory and Learning, Social and Personality Development, Cognitive Development, Language Development, Practicum in Developmental Psychology and Dissertation. The remaining hours of coursework are determined by the student and the supervisory committee.

Developmental Psychobiology
Doctoral students in this program are required to complete the entire pro-seminar series of eight courses as outlined above or their equivalent if the student has completed graduate coursework at another school. In addition, the following courses are required: Animal Behavior, Neuroanatomy, Seminar in Developmental Psychobiology, nine hours of biological science and Dissertation. The remaining hours of coursework are determined by the student and the supervisory committee.

Summary of Procedure for the Doctor of Philosophy Degree
This summary of procedure should be studied carefully in connection with the Graduate College calendar.

1. Admission to the UNL Graduate College by the evaluation of official transcripts presented in person or by mail prior to registration.
2. Registration after consultation with advisers in major and minor departments.
3. Appointment by the UNL Graduate Office of a supervisory committee on the recommendation of the departmental or area Graduate Committee.
4. Submission to the UNL Graduate Office of a program approved by the supervisory committee setting forth the complete plan of study for the degree prior to completion of more than half of the minimum requirements.
5. Satisfactory completion of foreign language or research tool requirements set forth in the approved program and passing of comprehensive examinations in major and minor or related fields when the student's program of courses is substantially completed.
6. Submission to the UNL Graduate Office of a report from the supervisory committee on the specific research for the dissertation and progress to date.
7. Admission to candidacy for the Ph.D. degree by filing a report in the Graduate Office of the passing of the comprehensive examinations and the completion of language and research tool requirements (at least seven months before the final oral examination). The term of candidacy is limited to three years.
8. Filing of an application for the degree at the Registration and Records Office, Information Window, 208 Administration Building at UNL. This application is effective during the current term only. It must be renewed at the appropriate time if requirements for graduation are not completed until during a later term.
9. Presentation of the dissertation and the abstract to the members of the reading committee in sufficient time for review and approval, which must be obtained at least three weeks prior to the final examination.
10. Presentation to the Graduate Office of two copies of the approved dissertation, three copies of the approved abstract and the application for the final oral examination at least three weeks prior to the date of that examination.
11. Passing of any required final oral examination.
12. Deposition of two copies of the dissertation in proper form, one copy of the abstract and a signed agreement for
Professional Programs in the Area of School Psychology

Application
Application for admission to the programs in school psychology must be filed with the School Psychology Committee of the Psychology Department and the Office of Admissions. The applications should include official transcripts of all previous college work, scores for the Graduate Record Examination Aptitude Test, a vita and three letters of recommendation. Applications must be completed by February 28 for the following fall semester. Before a final decision is made concerning admission, the applicant must be interviewed by at least two members of the School Psychology Committee.

Certification
Students may take work leading to a recommendation for certification as a school psychologist. A minimum of 30 semester hours of work beyond the Master's degree is required for the recommendation. Filing of an acceptable plan of study with the Graduate Office will be required on admission to the program. Students will arrange their programs according to the subject matter areas below. In addition to the courses required for the 30 hours beyond the Master's degree, the student must complete requirements for the Master of Arts or Master of Science in Educational Psychology or its equivalent. Since individual students may have widely variant backgrounds, considerable flexibility is allowed in choice of electives. However, the final decision on the appropriateness of a program rests with the Psychology Department. Admission to the program signifies that the student's program has been approved. Students must contact the School Psychology Committee when starting their studies in order to facilitate individual program planning. The student's adviser must be a member of the School Psychology Committee. Students working toward certification must be enrolled in the Ed.S. degree program unless they have a waiver from the Director of the School Psychology Program.

The Ed.S. degree in School Psychology requires completion of 66 graduate hours including those taken for the Master's degree. The requirements for this degree are the same as for those leading to certification as a School Psychologist with one addition. The degree candidate must write and defend a field project which deals with research or supervised experience in the area of School Psychology. The student must consult with the School Psychology Committee before starting the specialist project. Ed.S. students can apply for certification as School Psychologists when they have completed all of the requirements listed below. Students must complete the required four seminars and PSYCH 8000, 8391, 8500, and 8520 before they can enroll in PSYCH 8530, 8540, and 8580. PSYCH 8530 must be completed before a student can enroll in PSYCH 9580, but PSYCH 8540 and 9580 can be taken at the same time.

1. Required Proseminar Courses - Total 12 hours
   Proseminars to be selected according to Departmental policies and approval by the student's adviser.

2. Required Courses in Psychological Methods - Total 33 hours
   - PSYCH 8316 (or 4310) Psychological and Educational Testing
   - PSYCH 8000 The Profession of Psychology
   - PSYCH 8500 Introduction to School Psychology
   - PSYCH 8520 Clinical Assessment I: Foundations
   - PSYCH 8530 Individual Tests I
   - PSYCH 8540 Individual Tests II
   - PSYCH 9580 Personality Assessment
   - PSYCH 8806 Social Work, Psychology, and the Law
   - PSYCH 8570 Behavior Modification
   - PSYCH 8550 Introduction to Therapeutic Techniques with Children (or a suitable psychodynamic intervention course in psychology, social work, or counseling)
   - PSYCH 8556 Psychology of Exceptional Children
   - SPED 8900 Administration and Supervision of Special Education

3. Required Professional Education Courses - Total 12 hours
   At least four (4) courses will be selected, with at least one course in each of the following three (3) supporting areas: Advanced Child Psychology and Studies; Family Psychology and Studies; and Special Education and Curriculum Studies. Courses will be determined by the student's career preferences and state certification requirements.

   The following courses are examples of courses that could be included in the three (3) aforementioned supporting areas:

   **ADVANCED CHILD PSYCHOLOGY AND STUDIES**
   - PSYCH 8550 Learning in Children
   - PSYCH 9470 Psychopathology of Youth
   - PSYCH 9550 Social and Personality Development
   - HED 6250 Human Sexuality

   **FAMILY PSYCHOLOGY AND STUDIES**
   - PSYCH 9910 Topical Seminar in Psychology (Topic: Family Psychology)
   - SOWK 8250 Family Analysis and Treatment
   - SOWK 8280 Social Work Practice in Marriage, Divorce, and Remarriage Adjustment
   - SPED 8716 Interactions Between Professionals and the Parents of Handicapped

   **SPECIAL EDUCATION AND CURRICULUM STUDIES**
   - SPED 8400 Learning Disabilities
   - SPED 8606 Introduction to Mental Retardation
SPED 8910 Theories of Assessment and Diagnosis of Learning Deficits

4. Practicum in School Psychology (PSYCH 9970)
   The student's program must include from four to six credit hours of practicum. The general rule is that 50 clock hours are required for each hour of credit. The usual practice is for a 3-hour practicum emphasizing assessment and a 3-hour practicum emphasizing behavior intervention. At least half of the credits must be earned in a school setting. Each practicum is developed to meet the individual student's needs and must be approved by the School Psychology Committee before the student is allowed to enroll. Practica must be requested in writing by November 1 and April 1 and arranged by December 1 and May 1 of the academic year.

5. Internship in School Psychology (PSYCH 9980)
   An internship totaling at least 1250 clock hours must be completed before the student will be recommended for endorsement as a school psychologist. This will normally be taken after the student has completed all other requirements, including both practicum experiences. The internship must have an endorsement as a psychological assistant. The internship is usually completed in one of the Omaha-area schools but other sites are possible. The exact details of the internship are worked out by negotiation involving the student, the adviser, and the representative of the school system involved. Results of these negotiations must be approved by the School Psychology Committee. The student may sign up for three credit hours for each semester of internship completed. Internships must be requested in writing by November 1 and April 1, and arranged by December 1 and May 1 of the academic year.

   Before a student can arrange an internship he/she must receive the psychology assistant certification from the State Department of Education. This certification is necessary for the student to have the legal right to practice psychology in the schools.

6. Applied Project – Total three hours
   Each student must pursue both the Specialist in Education degree and certification; for the Specialist in Education degree, an applied field research project must be approved by the School Psychology Training Program faculty and completed by the students for three credit hours. Until such time as a new course number is assigned, credit will be earned under PSYCH 9960 Research Other Than Thesis.

Recommendation for Certification

In addition to completion of required courses with acceptable grades (a "B" or better in each course applied to satisfying the program), the faculty of the School Psychology Training Program and the chairperson of the Department of Psychology have the explicit authority to require each student to demonstrate ethical, emotional, and behavioral qualities consonant with meeting the expectations of public policy for the practice of professional school psychology. Any denial of recommendation for certification on these criteria will be subject to the grievance and appeal policies of the Graduate College.

NOTE: The above has been approved by the School Psychology Training Program faculty, and are subject to further review, modification, and approval by various sources in the Department of Psychology and the Graduate College.

Course Descriptions

4010/8016 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. Prereq: None.
4660/6666 Environmental Psychology (3) A study of effects of natural and artificial environments on human behavior. Particular emphasis on effects of spatial arrangements and their interactions with social distance, territoriality, privacy and such. Prereq: Basic Statistics or Experimental Psychology with laboratory or permission.
4250/8256 Limits of Consciousness (3) A survey of theories, practices and research on altered states of consciousness. Emphasis on experiential as well as intellectual proficiency. Prereq: None.
4270/8276 Animal Behavior (3) Behavior of diverse animals for the purpose of 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. Prereq: PSYCH 1010 and BIOL 1150 or permission. (Same as BIOL 4270/8276)
4260/8266 Animal Behavior Laboratory (2) Laboratory and field studies of animal behavior with an ethnological emphasis. Classical laboratory experiences and independent studies will constitute. Prereq: BIOL/PSYCH 4270/8276 or concurrent enrollment. (Same as BIOL 4260/8266)
4310/8316 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. Prereq: PSYCH 1020 or 3510 and 2130.
4330/8336 Individual Differences (3) A critical study of experimental and statistical investigations of the influence of age, sex, professional background and environment in causation of individual differences in mental traits. Prereq: Nine hours of psychology including introduction to Psychology and Basic Statistics.
4430/8436 Psychoanalytic Psychology (3) This course is for non-majors. It focuses on Freud and psychoanalytic psychology. Induced are many insights as to human nature, e.g., with regard to sex, aggression, narcissism and greed. Prereq: Graduate and an introductory psychology course.
4440/8446 Abnormal Psychology (3) A course designed to examine the abnormal behavior of individuals. Symptoms, dynamics, therapy and prognosis of syndromes are considered. Prereq: PSYCH 1010.
4450/8456 Personality Theories (3) A comparative approach to the understanding and appreciation of personality theories considering history, assertions, applications, validations and prospects. Prereq: None.
4470/8476 Jungian Psychology (3) This course is for non-majors or majors. It begins with a study of Freud and then proceeds to Jung. Analytical psychology is emphasized including philosophic, religious, gender and literary analyses. Prereq: Graduate and an introductory psychology course.
4480/8486 Eastern Psychology (3) Theories and techniques of Buddhist psychology with special emphasis on Zen practice. Emphasis on experiential as well as intellectual proficiency. Prereq: Graduate.
4520/8526 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. Prereq: Permission of instructor.
4550/8556 Retardation (3) This course considers significantly subaverage intellectual functioning originating during the developmental period and associated with impairment in adaptive behavior. Research is emphasized. Prereq: PSYCH 4310/8316 or PSYCH 2130 or equivalent and PSYCH 3430 or 4450/8456.
8550 Introduction to Therapeutic Techniques With Children (3)
Purpose of this course is to become familiar with play therapy, a technique for enhancing the adjustment and maturity of children. The history and methods of and the research with play therapy are considered. Prereq: Permission of Instructor.

8560 Learning in Children (3) Course dealing with learning in infants, children and, for comparison purposes, adults. Research relevant to developmental differences in learning ability will be emphasized. Content areas included will be learning methodology with infants and children, learning in infancy, probability learning, transposition and reversal shift learning, imprinting, habitation and imitation learning.

8580 Psychology of Women (3) A course providing comprehensive coverage of psychological theory and research pertaining to women. Critical analysis of theoretical and experimental issues will be emphasized. Students will participate in the conduct of the course and will be expected to write an appropriate research proposal. Prereq: Graduate, any department or permission of instructor.

8900 Problems in Psychology (1-6) A faculty-supervised research project, involving empirical or library work and oral or written reports. Prereq: Written permission of department.

8950 Practicum in Industrial Psychology (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. Prereq: Written permission of your practicum committee.

8970 Practicum in Educational Psychology (1-6) Faculty-supervised experience in an educational agency designed to acquaint the student with practical problems faced by psychologists who work in educational settings. Prereq: Written permission of your practicum committee.

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 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). Prereq: PSYCH 9560 and permission of Developmental Psychology Area Committee.

8990 Thesis (1-6) Independent research project written under supervision of a faculty committee. May be repeated up to a total of six hours. Prereq: Written permission of your thesis committee.

9030 Seminar: Topics in Industrial/Organizational Psychology (3-5) A topic area within field of Industrial/Organizational Psychology will be explored in depth. Prereq: Graduate and permission of instructor.

9040 Prospective: Learning (3) A comprehensive and intensive coverage of experimental literature on learning in humans and animals. Prereq: Permission of instructor.

9080 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. Prereq: PSYCH 2130 or equivalent.

9100 Prospective: Analysis of Variance (3) A course providing a theoretical and practical understanding of inferential statistics emphasizing the analysis of variance model. Prereq: Permission of instructor.

9110 Prospective: Regression and Correlation (3) A course is intended for graduate students in psychology as part of a core requirement for four semesters. It is appropriate for persons in other disciplines interested in a correlational approach to the study of relationships among variables. Prereq: Permission of instructor.

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. Prereq: PSYCH 9050, 9100, and 9110 or permission of instructor.

9210 Prospective: Perception (3) A comprehensive and intensive coverage of the experimental literature on perception in humans and animals. Prereq: Permission of instructor.
9230 Proseminar: Physiological Psychology (3) A study of the biological substrates of behavior with emphasis upon neuroanatomy, neurophysiology, and neuropsychology. Prereq: Permission of instructor.

9250 Seminar in Developmental Psychology (3-9) An in-depth analysis of a specific topic in psychology. Prereq: Permission of instructor.

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. Prereq: Students should have prior graduate-level course work or experience in research design and statistics in the applied social sciences.

9430 Proseminar: Personality (3) A course considering the effects of personality variables on behavior. A historical, theoretical, psychometric and experimental approach will be emphasized. Prereq: Permission of instructor.

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. Prereq: Permission of instructor.

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. Prereq: Twelve hours of psychology and/or gerontology or permission. (Same as GERO 9460)

9520 Linguistic Development (3) Theory and research concerning the acquisition of language are discussed. Attention is paid to long-standing controversies in developmental psycholinguistics, as well as to the most recent observational and experimental data regarding phonological, syntactic, and semantic development. Prereq: PSYCH 9560.

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. Prereq: PSYCH 9560 or equivalent.

9550 Social and Personality 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. Prereq: Graduate and PSYCH 9560 or equivalent.

9550 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 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. Prereq: Graduate.

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. Prereq: A minimum of one course in learning theory (PSYCH 6560, 8570, 9040, or equivalent) and permission.

9574 Laboratory in Applied Behavior Analysis (3-6 hrs) 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. Prereq: PSYCH 9570 or permission.

9580 Personality Assessment (3) A course dealing with projective and objective methods for personality assessment and intended for advanced graduate students in psychology preparing to be clinical practitioners in schools and mental health facilities. Prereq: Foundation courses in tests and measurements, abnormal psychology and personality theories; two courses in individual intelligence testing; and permission of instructor.

9590 Seminar in Developmental Psychology (3-9) 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. Prereq: Completion of the proseminar sequence and permission of instructor.

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. Prereq: Admission into industrial psychology graduate program.

9620 Industrial Training and Development (3) An analysis of the theoretical and practical problems of conducting training programs in industry including design, implementation and evaluation. Emphasis is placed on design and implementing training programs in response to actual industrial situations. Prereq: Admission into industrial psychology graduate program.

9650 Industrial Psychology Research Methods (3) Acquisition of skills in writing research proposals, executing research and writing journal articles. Course intends to introduce students to the various research data collection and statistical techniques that are applicable to industrial psychology research. Prereq: Admission into industrial psychology graduate program.

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. Prereq: PSYCH 9050 (may be taken concurrently).

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. Prereq: PSYCH 9660.

9790 Seminar in School Psychology (3) This course is designed to give the advanced student in the School Psychology Program an overview of significant professional topics in the field. 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. Every attempt will be made to take the principles from the classroom and develop the principles of practice which constitute the field of school psychology. Prereq: Completion of a Master's degree, and admission into the School Psychology program.

9910 Topical Seminar in Psychology (1-3) A discussion of specific advanced topics which will be announced whenever the course is offered. Prereq: Permission of instructor.

9950 Practicum in Organizational Behavior (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. Prereq: Permission of department and admission to doctoral program.

9950 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. Prereq: Enrollment in a graduate program beyond the master's level and permission of department.

9970 Practicum in School Psychology (1-6) Faculty-supervised experience in an educational agency designed to acquaint the student with the practical problems faced by school psychologists. Prereq: Admission to school psychology program and written permission of department.

9980 Internship in School Psychology (3-6) A systematic exposure to the practice of psychology in the schools. School consultation in a variety of educational settings will be undertaken. The student's responsibilities will be documented in a contractual agreement between the intern student and the local and university supervisors. Prereq: Completion of four hours of PSYCH 9970 and written permission of the School Psychology Committee.
Master of Public Administration

The Master of Public Administration (MPA) is a professional graduate degree designed: (1) to prepare students for careers in the public service - national, state, local or non-profit agencies, and (2) to provide professional development opportunities for those already in the public service.

Professionals with general administration skills are needed in all areas of government. The MPA program stresses the development of management and administrative abilities important to both staff specialists and administrators.

Students in the MPA program likely will come from widely differing backgrounds. Some may come from current public employment and professions such as law, health administration and business administration while others may enter with degrees in the social sciences, engineering, business, human services or the humanities.

The MPA courses are regularly offered at night to meet the needs of full-time employees.

The Department of Public Administration is a member of the National Association of Schools of Public Affairs and Administration (NASPAA). In 1985, the MPA program was once again placed on the National Roster of Programs found to be in conformity with NASPAA Standards for Professional Masters Degree Programs in Public Affairs and Administration.

Degree Requirements

Thirty-nine graduate credit hours are required for the MPA degree. The course work shall include 24 hours of core courses required of all MPA students. The optional courses chosen by the student with the assistance of a departmental adviser, may include one of the 12-hour plans listed below or may, on occasion, include a separate 12-hour plans of study designed to meet a particular set of career development needs. In addition, one elective course may be selected by the student.

A comprehensive written final examination is required of all MPA students.

Admission

The general prerequisite for admission to the MPA program is a Bachelor of Arts or Bachelor of Science degree or equivalent.

To be admitted unconditionally, the student must have achieved a grade point average of 3.0 on a 4.0 system, for the undergraduate major of Public Administration, or for the junior-senior years and must have completed all other admission requirements for Graduate Studies.

Provisional admission may be granted where the applicant has achieved a grade average of 2.7 or above. Exceptions to the 2.7 grade point average may be made by the Graduate Program Committee in conjunction with the Graduate Dean, where the applicant:
1. Has a demonstrated record of public sector administration; or
2. Has demonstrated through recent coursework an ability to successfully complete graduate work.

Students who wish to take courses for professional growth or personal interest but who do not intend to pursue an advanced degree may be granted unclassified admission.

To apply for admission to the MPA program, a student has to submit an application for admission, a work history or resume, and transcripts from all undergraduate institutions to the UNO Admission Office.

Non-native Students

Students who plan to attend the MPA program from foreign countries where English is clearly a second language may be granted provisional or unclassified admission subject to the following conditions:

They must complete the TOEFL exam with a score of 550 or better.

They must take the English Diagnostic test administered by the Department of English and demonstrate through this test the ability to communicate orally and in writing in a manner sufficient to compete effectively at the graduate level with English-speaking native-born Americans.

1. Should the student be unable to pass the TOEFL exam or meet the requirements as described in the English as a Second Language courses offered by the English Department at UNO and demonstrate to the satisfaction of their instructor and the ILUNO staff that their English competency is adequate for graduate-level work. When such competency has been determined, the student will need to retake the TOEFL and obtain a score of 550.

Quality of Work Students

Students admitted provisionally must receive a grade of "B" or above in each course during the first 12 hours of coursework.

All students admitted June 1990 or after, regardless of whether their admissions are granted unconditionally, provisionally or as unclassified students, must have attained a grade point average of at least 3.1 at the end of the first 12 hours of coursework.

Failure to meet these quality of work standards, or any others specified in the Graduate Catalog, will result in disenrollment from the program. Students may at that point apply for readmission according to procedures in this Graduate Catalog.
Application for Candidacy

In accordance with Graduate College guidelines, students must apply for candidacy for the degree when:

1. A minimum of six hours of graduate credit necessary to the degree program have been completed.
2. A grade point average of "B" with no grade lower than "C" has been earned.
3. The student is not currently carrying "incompletes" within his/her area of study.

As a rule, no degree can be awarded in the same semester that candidacy for the degree is approved.

Application forms should be filled out by the student, in consultation with a faculty adviser, as soon as the student can qualify for admission to candidacy.

Transfer of Credit

Students may transfer up to 12 hours of coursework required for the MPA degree requirements. This requires approval of the Graduate Program Committee. Students should discuss this with a faculty adviser. The request for a transfer of credit should be made as soon as possible but no later than when filing for candidacy. The request to transfer credits requires a letter of explanation from the student, as well as all relevant course syllabi.

Core and Required Courses

The Department of Public Administration has eight core courses, required for all MPA students:

- PA 8000 Research Methods for Public Affairs
- PA 8050 Introduction to Public Administration
- PA 8306 The Policy Process
- PA 8400 Public Budgeting
- PA 8410 Public Personnel Management
- PA 8420 Organization Theory and Behavior
- PA 8440 Seminar in Organization Development in Public Agencies
- PA 8480 Seminar in Public Financial Administration

*Students beginning their graduate coursework in the fall semester, 1991-92, must take PA 8050, Introduction to Public Administration during the first six hours of coursework. This requirement means that a student can take PA 8050 in conjunction with another course during the first semester, or may take one graduate course prior to enrolling in PA 8050. A student may, in rare instances, take PA 8050 during the first nine hours, but only with the express permission of the Graduate Program Committee.

Optional Areas

General Management Option

This option is for students who are seeking administrative generalist careers. The reason for taking courses in this option should be future utility rather than present convenience.

Approved courses for this option are divided into two clusters. Student must select at least two courses from Cluster One and choose two additional courses from Cluster One or from Cluster Two.

Cluster One

- PA 8100 Seminar in Public Administration
- PA 8110 Managing Information in the Public Sector
- PA 8460 Seminar in Public Personnel Administration
- PA 8470 Administrative Ethics
- PA 8606 Administrative Law

Cluster Two

- PA 8030 Internship
- PA 8040 Internship
- PA 8065 Introduction to Urban Planning
- PA 8436 Municipal Administration
- PA 8450 Seminar in Advanced Management Analysis in Public Agencies
- PA 8495 Public Sector Labor Relations
- PA 8500 Issues in Public-Private Sector Cooperation
- PA 8516 Long-Term Care Administration
- PA 8550 Issues in the Administration of Non-Profit Organizations
- PA 8700 Seminar in Grants and Contracts
- PA 8810 Seminar in Metropolitan Planning
- PA 8896 Special Topics in Public Administration
- PA 8906 Special Topics
- PA 8920 Readings in Public Administration
- PA 8940 Research in Public Administration
- PA 8930 Negotiation Skills in General Management
- PA 8536 Training and Development in the Public Sector

Gerontology Option

Students selecting this option may also earn the Certificate in Gerontology at the same time. Those planning to earn the Certificate in Gerontology must apply and be admitted to the Gerontology program as well as to the MPA program.

Students are required to take GERO 8116, Applied Social Gerontology, and GERO 8676, Programs and Services for the Aging. Other recommended courses are:

- GERO 8106 Educational Gerontology
- GERO 8466 Aging and Human Behavior
- GERO 8506 Legal Aspects of Aging
- GERO 8526 Mental Health and Aging
- GERO 8730 Thanatology-Study of Death
- GERO 8856 Hospice and Other Services for the Dying Patient/Family
- GERO 8986 Counseling Skills in Gerontology

Local Government Option

Students taking this option are required to take PA 8436, Municipal Administration. Also, recommended courses include:

- PA 8100 Seminar in Public Administration
- PA 8300 Seminar in Public Policy
- PA 8906 Special Topics-Municipal Law
- GEOG 8126 Urban Geography
- ECON 8850 Seminar in Urban Economics
- CRP 811 Urbanism and Planning in the U.S.*

Planning Option

Students selecting this option may have to take one or more courses on the Lincoln campus. Recommended courses include:

- UBNS 8066 Introduction to Urban Planning
- OR
- CRP 811 Urbanism and Planning in the U.S.*
- CRP 813 Planning Process and Theory*
- CRP 815 Housing Renewal and Development*
- CRP 822 Research Methods for Planning*
CRP 828 Planning Administration and Implementation*
CRP 897 Selected Topics in Planning*
CRP 899 Special Problems in Planning*
CRP 913 Planning and the Natural Environment*
CRP 915 Planning within the Intergovernmental Context*
CRP 917 Planning with Minority and Law Income Groups*
CRP 924 Human Resource Planning*
GEOG 8126 Urban Geography
GEOG 8166 The American Urban Landscape

Social Work Option
Students taking this option should have a broad social science background.
Foundation Courses:
SOWK 8000 Human Behavior and the Social Environment
SOWK 8050 Social Welfare Policy, Services and Analysis
Macro Practice Courses:
SOWK 8500 Social Development
SOWK 8520 Social Work Administration
SOWK 8540 Social Welfare Planning
SOWK 8560 Supervision in Social Work
SOWK 8580 Social Work, Social Action, Change and Political Advocacy
Social Problem/Condition Courses:
SOWK 8606 Social Work in Mental Health
SOWK 8666 Social Work in Child Welfare
SOWK 8686 Social Work and the Law
Special Studies and Social Welfare:
SOWK 8940 Evaluation of Social Programs

Criminal Justice Option
Students choosing this option should have background in criminal justice.
Recommended courses:
CJUS 8010 Nature of Crime (same as CJUS 811*)
CJUS 8020 Seminar in Administration of Justice
CJUS 8100 Criminal Justice Organization, Administration and Management
CJUS 8110 Criminal Justice Planning and Change
CJUS 8040 Seminar in Police and Society

Health Option
Health option courses should be selected in consultation with UNMC adviser and departmental adviser.

Other Specialized Options
Students may design a specialized option to fit their career and vocational goals. These courses, however, must contain a definable substantive area and provide a cohesive set of educational objectives. Such an option must receive the approval of the Graduate Program Committee.

Electives
Students may take six hours of their degree program within the MPA degree as an elective. However, this elective must relate to the optional area or to some other substantive element of the degree program.
NOTE: *Courses offered on the Lincoln campus.

Course Descriptions
4060/8066 Introduction to Urban Planning (3) This course will serve as an introduction to the development of urban planning as it has shaped and reacted to major trends in U.S. history. It will provide students with major themes and traditions in the field of planning and will include planning practice, planning procedures and methods and contemporary issues in the field. Prereq: Graduate.
4430/8436 Municipal Administration (3) The administrative structure and administrative practices of American cities covering such as finance, personnel, public works, public safety, health, utilities and planning. Prereq: None.
4490/8496 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. Prereq: None.
4510/8516 Long-Term Care Administration (5) An investigation of the broad range of policy issues, theoretical concerns and practical management strategies influencing the design, organization and delivery of long-term care services. Prereq: Permission of instructor. (Same as GERO 8516)
4560/8566 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. Prereq: PA 2170 or permission of instructor.
4600/8606 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. Prereq: None.
4890/8896 Special Topics in Public Administration (3) A course with the purpose of acquainting the student with key issues and topics of special concern to public and non-profit management that they otherwise would not receive elsewhere. No more than six hours of total credit in PA 8896 and PA 8906 can be taken without prior permission by the graduate program committee. Further, each topic in the course will need the approval of the Dean of Graduate Studies prior to being offered. Prereq: None.
4900/8906 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. Prereq: None.
8000 Research Methods for Public Affairs (3) This course is designed to assist students develop their skills in qualitative analysis of information relevant to public affairs. The course introduces students to fundamentals of research designs, strategies of data collection and basic statistical analysis. Prereq: Permission of advisor.
8030-8049 Internship (3 per sem.) Maximum of 6 hours to be granted upon completion of written report or internship. Internship in some government: national, state, local or non-profit agency and in some instances public-oriented private agencies. Students will take the course as Credit/No Credit. Prereq: Thirty hours of MPA coursework or permission of Graduate Program Committee.
8050 Survey of Public Administration (3) This course is designed for graduate students who have had no undergraduate introduction to public administration coursework. It involves a study of the environment of public administration, introducing the student to public organization theory and practice and functions and problems of the public administration process. Prereq: None.
8100 Seminar in Public Administration (3) An in-depth study of the relationships existing between the art and science of public administration, on the one hand, and the processes of government on the other. The emphasis is principally on broad categories of political and administrative issues as they condition each other. Prereq: None.

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. Prereq: None.

8200 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. Prereq: PA 8420.

8300 The Policy Process (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. Prereq: Permission of adviser.

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. Prereq: PA 8000.

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. Prereq: None.

8410 Public Personnel 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. Prereq: None.

8420 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.

8440 Organization Development and 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 we 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. Prereq: PA 8420.

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. Prereq: PA 8420 or permission of instructor.

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. Prereq: PA 8410.

8470 Administrative Ethics (3) This course is designed to make students of public management aware of and sensitive to the ethical components of public sector administration. Ethical concerns permeate much of what public administrators do, and this course focuses on identifying common ethical concerns along with their implications and consequences. Prereq: None.

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 purpose, processes and issues associated with particular techniques or technique areas. Prereq: None.

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 public-private 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 activities have become an important aspect of public administration in recent years. Prereq: None.

8550 Issues in the Administration of Non-Profit Organizations (3) This course focuses on the administration and management of non-profit organizations and the relationships between non-profits and government. Prereq: None.

8700 Marketing and Grants for Public and Non-Profit Organizations (3) This course will focus on the uses and approaches to marketing and grants development in public and non-profit organizations. Particular emphasis will be placed on techniques for analyzing services and educating constituents and others about these services, as well as methods of linking grant development with the goals and objectives of the public or non-profit organization. Prereq: None.

8720 Health Care Finance (3) Health care finance represents an analysis of health care concepts, issues and trends form 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. Prereq: PA 8460.

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. Prereq: UBNS 8066 or permission of instructor. (Same as GEOG 8810)

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. Prereq: Eighteen hours in the MPA Program or permission of graduate program committee.

8930 Negotiation Skills in General Management (3) This course will focus on the theories of negotiation and the negotiating process. Prereq: None.

8940 Research in Public Administration (1-3) The course is intended for advanced graduate students in public administration. It is especially suitable for those in-career students who have had their internships waived by and who might profit more by in-depth research on a problem of public administration rather than additional classroom courses. Prereq: Twenty-one hours in the MPA Program or permission of graduate program committee.

9100 Seminar in Strategic Planning and Management in the Public Sector (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. Prereq: PA 8420 or permission.
SOcial Work

Professors:
Andrews, Burl, Coyne, Dendinger, B. Hagen, Ozaki, J. Woody
Associate Professors:
Barnett, Grandbois, McGrath, G. Weber, Zelinisky

The Profession of Social Work
Social work is one of the "helping professions" concerned with the quality of human life. Specifically, the social worker is concerned with people's ability to function meaningfully and effectively in transaction with the environment (i.e., family, friends, associates and the community at large). Social workers bring systematized knowledge to bear on their dealings with people individually, in families, in other groups and collective associations, with communities, societies and organizations with a view to helping in the resolution of problems which cause stress in social transaction.

In these endeavors, social workers are employed in public and private counseling agencies and services, medical settings, schools, residential and community agencies providing care for the mentally ill and retarded, court and correctional agencies, community planning and development agencies and programs. Their activities and interventions are designed to promote more effective functioning of society as it struggles to "provide for the general welfare" as well as to help people, families, groups, and institutions within the society achieve self fulfillment.

The School of Social Work is accredited by the Council on Social Work Education (CSWE), the national accrediting body for all social work education.

Requirements for the Degree of Master of Social Work
1. The M.S.W. program consists of two parts, the Foundation Program, which includes generalist knowledge and skills common to all professional social workers, and an Advanced-Standing Program, which includes opportunities for some in-depth specialization in practice methods and in specific fields of practice. The 24 hours of foundation courses along with the 39 hours in the advanced program comprise the two year program.

Foundation Program
Students who have earned a Bachelor's degree but have not completed an accredited undergraduate social work program may enter the Foundation Program. Many of the foundation courses may be waived by students who successfully pass the waiver exams.

Advanced-Standing Program
The Advanced-Standing Program is for students who have earned a BSW from an accredited program and those who completed the Foundation Program. It requires a minimum of 39 hours in graduate social work study concentrating in one of these areas:

Micro Social Work—practice with individuals, families and small groups.
Macro Social Work—practice in the areas of policy, planning, administration, organizing and social change.
A combination of macro/micro—by selective use of electives and practicum.

National accreditation requires a minimum of two courses per semester and the M.S.W. program must be completed within four years.

2. Completion of an undergraduate biology course or equivalent is required before entry into the program.

3. Details about research, practicum and other course requirements as well as waiver examinations may be obtained from the School of Social Work.

4. The GRE or MAT (Miller Analogies Test) score shall be submitted at the time of application.

5. A final written comprehensive examination is required.

6. The Director of the School of Social Work may approve loads to 15 hours for Social Work majors.

The type and credit value of each of the courses is indicated in the course descriptions below. Courses offered by the School are subject to change.

NOTE: Social Work students may transfer coursework required for the MSW program. Courses must be approved by the School of Social Work Graduate Program Committee and the Dean of Graduate Studies and Research as being appropriate substitutes for a requirement or elective.

Courses Descriptions
Foundation
8000 Human Behavior and the Social Environment (4) A foundation course providing basic knowledge of the contributions of the biological, behavioral and social sciences to understanding of human functioning in transaction with social structure. Prerequisite: Graduate Social Work student or permission of School.

8050 Social Welfare Policy, Services, and Analysis (4) An examination of social policy development and the functioning of specific delivery systems together with beginning policy analysis embodying socio-economic, political, legal and psychological contexts. Prerequisite: Graduate social work student or permission of School.

8060 Institutional Racism and Sexism (2) This course examines the problems and issues of institutional racism and sexism as it relates to social injustice. The focus is on the causes of institutional racism and sexism and its effects on the individual, groups, families and institutions. The course will concentrate on the analysis of related institutional barriers and constraints affecting racial minorities, homosexuals, women. Discussion will be directed at increasing the awareness and appreciation of the issues and problems of institutional racism and sexism, and the advancement of strategies to eliminate the problems. Consideration will be given to the role of social work practice for the removal of institutional barriers for racial minorities, homosexuals and women. Prerequisite: Admission to Graduate Social Work program.

8100 Social Work Practice I (Generic) (2) This course is designed to serve as an introduction to the common core of concepts, skills, tasks and activities which are essential to the practice of social work and which serve as a foundation for further professional growth. Prerequisite: SWK 8000 prior to or concurrent with.

Courses Descriptions
Foundation
8000 Human Behavior and the Social Environment (4) A foundation course providing basic knowledge of the contributions of the biological, behavioral and social sciences to understanding of human functioning in transaction with social structure. Prerequisite: Graduate Social Work student or permission of School.

8050 Social Welfare Policy, Services, and Analysis (4) An examination of social policy development and the functioning of specific delivery systems together with beginning policy analysis embodying socio-economic, political, legal and psychological contexts. Prerequisite: Graduate social work student or permission of School.

8060 Institutional Racism and Sexism (2) This course examines the problems and issues of institutional racism and sexism as it relates to social injustice. The focus is on the causes of institutional racism and sexism and its effects on the individual, groups, families and institutions. The course will concentrate on the analysis of related institutional barriers and constraints affecting racial minorities, homosexuals, women. Discussion will be directed at increasing the awareness and appreciation of the issues and problems of institutional racism and sexism, and the advancement of strategies to eliminate the problems. Consideration will be given to the role of social work practice for the removal of institutional barriers for racial minorities, homosexuals and women. Prerequisite: Admission to Graduate Social Work program.

8100 Social Work Practice I (Generic) (2) This course is designed to serve as an introduction to the common core of concepts, skills, tasks and activities which are essential to the practice of social work and which serve as a foundation for further professional growth. Prerequisite: SWK 8000 prior to or concurrent with.
8120 Social Work Practice II (Micro) (2) An introductory course providing an overview of three basic theories of social work practice with individuals, families and small groups. The emphasis is on assessment of social situations leading to a choice of intervention appropriate to working with individuals, small groups or families. Prereq: SOWK 6120, 8160.

8140 Social Work Practice III (Macro) (2) This is an introductory course for graduate social work students which surveys basic theories and principles of social work practice with organizations, institutions and communities, and includes study of social action, community development and community organization. Prereq: Concurrent with or subsequent to SOWK 6000, 8050, and 8160 or permission of School.

8160 Generic Social Work Practicum I (3) This course is designed to provide individualized and experiential learning offered within the setting of a social service agency. The student will be introduced to a variety of social work practice roles, develop professional relationships with clients systems and learn to apply a number of interventional methodologies to effect change. In order to facilitate integration of classroom theory with practice, students will attend bi-monthly two-hour seminars. Prereq: Concurrent with or subsequent to SOWK 8100.

8170 Generic Social Work Practicum II (3) This course is designed to provide supervised individual learning experiences, in selected social welfare agencies. It is designed to introduce graduate students to beginning micro and macro social work practice. Prereq: SOWK 8160, concurrent with or subsequent to SOWK 8120, 8140.

**Micro Practice**

8200 Micro Intervention I (3) An advanced course providing an in-depth study of the theory and techniques of several major therapeutic modalities used with individuals and consideration of their use with families and groups. Prereq: SOWK 8170 or BSW.

8210 Micro Intervention II (3) To provide the student with knowledge of theories and practice in techniques in various modalities used in working with individuals, families and small groups with emphasis on particular settings such as rural mental health clinics, schools and family service agencies. Prereq: SOWK 8200 or permission of School.

8250 Family Analysis and Treatment (3) The family is considered as a system of social work intervention. Several theories of family interaction are considered; alternative modalities of family treatment are assessed; interventions skills are developed. Prereq: SOWK 8200 or permission of School.

8260 Gestalt-Transactional Analysis (3) An intensive didactic and experiential course designed to give students in-depth knowledge and practice skills in the combined use of transactional analysis (TA) and Gestalt therapy. Prereq: SOWK 8200 or permission of School.

8270 Analysis and Treatment of Sexual Problems (3) The course provides a brief intensive review of current theory and research in human sexuality and an emphasis on treatment and therapy approaches used for a variety of sex-related problems of individuals, couples and families. Prereq: SOWK 8200 or permission of School.

8280 Marriage, Divorce and Remarriage Therapy (3) This is an advanced practice course designed to prepare students to provide therapy for couples and families experiencing problems in intimacy, marital, divorce or remarriage adjustment. Prereq: For social work students, SOWK 8200; for others, professional practice course equivalent to SOWK 8200, to be determined by course instructor.

8290 Clinical Seminar in Mental Health (3) The course utilizes a seminar format to explore and discuss various aspects of clinical practice in a mental health setting. The seminars include focus on theoretical foundations of assessment and treatment, application of mental health practice skills to the clinical setting and relationship of theory to specific skills. Prereq: Bachelor's degree and experience in clinical settings; SOWK 8200 or permission.

8910 Independent Studies in Marriage and Family Therapy (1-3) This course offers the opportunity for deepening the student's knowledge and skills in selected areas of marriage and family therapy. May be repeated for up to six hours. Prereq: Graduate and permission of School.

**Practicum**

8400 Advanced Social Work Practicum I (3-4)? To provide individualized professional experience in micro or macro social work practice. Prereq: SOWK 8170 or BSW, SOWK 8200 prior to or concurrent with micro placement; or one of the following: SOWK 8600, 8520, 8540, 8580 prior to or concurrent with macro placement and permission of School.

8410 Advanced Social Work Practicum II (3-4)? To provide individualized professional experience in micro or macro social work practice, building upon opportunities provided and competence achieved in Advanced Practicum I. Prereq: SOWK 8400 or one advanced micro practice course prior to or concurrent with SOWK 8410 (SOWK 8210, 8250, 8520, 8580 prior to or concurrent with macro placement).

8420 Advanced Social Work Practicum III (1-4) To provide a third advanced practice opportunity in a selected social welfare agency or practice setting for refinement/addition of micro or macro social work practice skills. Prereq: SOWK 8410 and permission of School.

**Macro Practice**

8500 Social Development (3) An analysis of the social development model for affecting social and societal change. The concept of social development was introduced by the United Nations, has been adopted by many developing nations and is gaining increased utilization in developed nations including the United States. The course is offered for students working towards a Master's degree in Social Work with an emphasis on macro social work practice. Prereq: SOWK 8140 and 8170 or BSW, or permission of School.

8520 Social Work Administration (3) A study of the role of the social work administrator in the creation and administration of social service agencies of varying sizes. Prereq: SOWK 8140, 8170 or BSW, or permission of School.

8540 Social Welfare Planning (3) An advanced course in social planning, including administrative planning for social services, comprehensive planning for social welfare programs and planning for social change. Prereq: SOWK 8140, 8170 or BSW, or permission of School.

8650 Supervision in Social Work (3) To provide the student with knowledge of theories and practice in techniques used in supervising paid or volunteer staff in social agencies, with emphasis on the leadership and helping functions of the supervisor in both educational and administrative roles. Prereq: SOWK 8170 or BSW, or permission of School.

8680 Social Work, A Social Action, Change & Political Advocacy (3) An advanced policy course in intervening and influencing social welfare policy at various points in the political system. Prereq: SOWK 8140, 8170 or BSW, or permission of School.

**Social Problem/Condition**

4010/8016 Social Work with American Indians (2) (Social Work students needing a third credit may enroll for a one credit SOWK 8800 or 6910.) This course provides the student with a broad study of the origins, influences and issues of the American Indian which affect social work practice. The usefulness of established social work generic methods is explored. Alternative methods applicable to culturally diverse people are presented. Experiential learning is emphasized. For social work students, the course meets the minority or social problem/condition/system requirement. Prereq: 8100 or BSW, or permission of School.

4020/8026 Social Work with Black Youth (2) (Social Work students needing a third credit may enroll for a one credit SOWK 8900 or 6910.) This course seeks to develop in students an awareness and understanding of some of the social and psychological realities influencing the behavior of black youth. The content draws upon theories, research and social work practice skills relevant to black youth, the cognitive process, and social systems which impact on black youth. Practice implications are emphasized. For social work students, the course meets the minority or social problem/condition/system requirement. Prereq: BSW or concurrent with or subsequent to SOWK 8200 and 8050, or permission of School.
4030/8035 Social Work with Hispanics (2) (Social Work students needing a third credit may enroll for a one credit SOWK 8500 or 8510.) This course is intended to develop in students awareness, familiarity and understanding of some of the social conditions and cultural traits of the Hispanic community with special emphasis on Mexican-Americans. This course will be the foundation for the adaptation of the social worker’s practice to meet the specific needs of this ethnic community. Prereq: BSW or concurrent with or subsequent to SOWK 8000 and 8050 or permission of School.

4040/8046 Working With Minority Elderly (3) This course is an interdisciplinary one, designed to provide the student with knowledge of the differing status, attitudes and experiences of the elderly within four major minority groups and to examine various service systems and practice models in terms of their relevance and effectiveness in meeting needs of the minority elderly. Prereq: BSW or concurrent with or subsequent to SOWK 8000 and 8050, or permission of School. (Same as GERO 4690/6990)

4180/8186 Permanence for Children (3) The course is designed for the student to acquire an understanding of the issues involved in providing services to those persons who have been affected by dependency, child abuse and neglect and to acquire skills in working with children, biological parents, foster parents, adoptive parents and other systems involved in the welfare of children. Fulfills either social problem/condition or graduate micro practice elective requirements. Prereq: SOWK 8100, 8106, SOWK 8856, or permission of School.

4600/8606 Social Work In Mental Health (3) This course is an elective for the advanced student who is seeking substantial specialized knowledge of current social work practice in mental health and mental retardation. Prereq: SOWK 8000 or BSW, or permission of School.

4830/8836 Social Work In Health Care Programs (3) A critical review of social work practice in health care programs; as it was, its current status, emerging roles, plans for an ideal situation. The design of the course provides for learning in both micro and macro aspects of health care delivery. The students will have an opportunity to examine and experience several aspects of health care delivery and the social worker’s role in it. Students will also be exposed to the various resources involved in the provision of health care and some of the administrative mechanisms that are currently utilized by these systems. Prereq: SOWK 8100 or BSW, or permission of School.

4860/8966 Social Work with Developmentally Delayed Children and Their Families (3) The course content will include theory, practice and social policy issues relevant to the social worker following an interest in child welfare. The student will gain an understanding of normal child development and the way in which a special need such as a physical handicap, mental retardation or emotional disturbance affects normal child development needs. Special emphasis will be placed on gaining social work skills relevant to families with exceptional children. For social work students, the course meets the social problem/condition requirement. Prereq: SOWK 8000, or BSW, or permission of School.

4720/8726 Rural Social Work (3) This course offers the student theories and practice techniques in the area of rural social work, including methods for working with individuals, families and groups as well as communities and rural agencies. There will also be an emphasis on rural mental health service delivery. Prereq: SOWK 8100 or permission of School.

4800/8806 Social Work, Psychology and the Law (3) An examination of some of the legal aspects of selected social work policy issues such as abortion, illegitimacy, alcoholism and drug addiction, creditor and debtor's rights, landlord and tenant relationships, housing law, right to treatment, status of the convicted individual, mental health commitment procedures. Prereq: SOWK 8050 or permission of School.

4850/8856 Hospices and Other Services for the Dying Patient/Family (3) This course is designed to involve students in the recognition of fears, concerns and needs of dying patients and their families by examining the hospice concept and other services available in our community. Factual information, readings, professional presentations, films and experiential exercises are offered to aid the student in understanding that hospice is an alternative to the traditional medical model so that when the "cure" system is no longer functional, then the "care" system, hospice, can be offered. Prereq: Senior or graduate in gerontology or social work, GERO 8700, or permission of School. (Same as GERO 4850/6856)

4850/8866 Woman's Issues and Sexism: A Social Work Perspective (3) This course will focus on the issues of feminism and sexism in social work practice and their implications for social service delivery systems, social policy and practice modalities. Prereq: SOWK 8100 or permission of instructor.

4880/8886 Topical Seminar in Social Work (2-4) Advanced topics and experiences in social work theory and practice. Specifics will be announced when the course is offered. The topics selected will be consistent with faculty expertise and student needs. This course may be repeated for up to nine hours credit. Prereq: Graduate.

8670 The Human Ecology of Child Abuse and Neglect: An Analysis of Research and Intervention (3) This course will provide a review of existing literature on the meaning, origins and consequences of child abuse and neglect. It will emphasize research issues in child abuse and neglect, and the student will design a research project. This serves as a research course or requirement. Prereq: SOWK 8920.

8700 Alcohol Abuse: Comprehensive Treatment Programs (3) An examination of problems and processes related to alcoholism which are common in a social work setting. Special emphasis is given to detection, intervention, referral, etiology and treatment alternatives and resources.

Special Studies and Social Welfare Research

8900 Special Studies in Social Welfare (1-6) Special study in a selected area of social welfare for deepening the student's knowledge in that particular area. Prereq: Permission.

8920 Seminar in Utilization of Research in Social Work (3) Emphasis is placed on the use of research in social work practice. Social and behavioral science research methods will be reviewed. Research reports exemplifying the methods will be evaluated; theories, major concepts, principles and findings will be identified, and their use in social work practice will be explored. Research on racism, minorities, social status, disabilities and Third World peoples will be reviewed. Statistics used in the studies will be reviewed. Prereq: Introductory research methods course, and introductory statistics course.

8940 Evaluation of Social Programs (3) A study of the various issues and methodology of social program evaluation. Evaluation of agency organizational structure, program design and effectiveness and social impact will be covered. Prereq: SOWK 8920, and concurrent with or subsequent to SOWK 8920, or permission of School.

8950 Research Methods In Clinical Practice (3) A study of the various issues involved in clinical research methodology. Introduction to the tools for documenting the effects of micro practice interventions (including single-case design, standardized measurement, self-report data, self-monitoring, etc.) Prereq: Graduate plus SOWK 8200 and 8920 or permission of school.

8960 Research Other Than Thesis (3) Students prepare a research proposal, carry out the proposed study and prepare a detailed report of the purpose, design, outcome and meaning of the study. Prereq: SOWK 8920 and permission of School.

8990 Master's Thesis (6) Under the supervision of the thesis instructor and the thesis committee, the student will complete a thesis research. Prereq: SOWK 8920 and permission of School.
SOCIOLoGY

PROFESSORS:
- Barger, Lamanna, Littrell, Rousseau, Wheeler

ASSOCIATE PROFESSORS:
- Clute

ASSISTANT PROFESSORS:
- Hess, R. Simpson, Skreija

COURTESY FACULTY:
- Suzuki

Degree Requirements
Applicants for admission to the graduate program in sociology should present a minimum of 15 undergraduate semester hours in sociology including courses in statistics and research methods.

Applicants who are admitted provisionally without statistics must pass SOC 2310, Basic Statistics with a grade of "C" or above. Required competence in undergraduate methods may be demonstrated by taking SOC 2510 for credit with a grade of "C" or above or by taking a program of independent work approved by the committee.

Students who pass these courses must complete six hours of thesis and a minimum of 12 additional graduate semester hours of coursework. Required competence in statistics must pass SOC 2310, Basic Statistics with a grade of "C" or above. Required competence in undergraduate methods may be demonstrated by taking SOC 2510 for credit with a grade of "C" or above or by taking a program of independent work approved by the committee.

Students without these courses may be admitted provisionally, but must remove the deficiency within the first year of graduate study. Students must also present scores from the general part only of the Graduate Record Examination before admission or during the first semester of enrollment.

Examinations: The student must demonstrate proficiency in sociology through successful completion of a comprehensive examination in one area of specialization.

The M.A. degree should be sought by students preparing for college-level teaching and continued academic work; the M.S. degree as preparation for field or action application of sociology.

Master of Arts
Students must complete two graduate only level method courses and two graduate only level theory courses with grades of "B" or better, and must pass a comprehensive examination in a special area. The special area comprehensive examination must be selected and the major field specialization must be approved by the committee.

Students must also meet the requirements for a minor in a social science discipline. Required competence in statistics must pass SOC 2310, Basic Statistics with a grade of "C" or above. Required competence in undergraduate methods may be demonstrated by taking SOC 2510 for credit with a grade of "C" or above or by taking a program of independent work approved by the committee.

Detailed requirements for the M.S. degree with a major in applied Sociology should be secured through consultation with the Sociology Office.

Course Descriptions

Anthropology

4200/8206 Urban Anthropology (3) The course is intended to examine the city as 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 so-called "third-world" and developed, industrialized ones. Graduate students will be required to do a substantive term paper on a topic mutually acceptable to the instructor and the student. In addition to the written work, the student may also be required to make an oral presentation in class of the research done and the major findings. Prereq: Permission of instructor.

4210/8216 Cultural Anthropology (3) Arts, economics, family, kinship, politics, religion, subsistence, technology, war and worldview 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. Prereq: Permission of instructor.

4220/8226 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 interpretation of that area's role in the development of urban societies in the continental United States; introduction to archaeological investigation techniques, dating methods and taxonomic concepts. Prereq: For 4220, ANTH 1050 or 4210. For 8226, permission of instructor.

4520/8526 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. Prereq: Senior or graduate or permission of instructor. Recommended: ANTH 1050. (Same as PSYCH 4520/8526 and COMM 4520/8526)

4920/8926 Seminar in Anthropological Problems (3) Seminar will cover a specific topic which will be announced each time the course is offered. The student will work with the instructor on projects designed to increase the student's depth of knowledge in specific areas. Prereq: Permission of instructor.

Sociology

4010/6016 Social Control of Behavior (3) The social processes by which the person's behavior is adapted to the group. External restraints, roles, self-control, analysis and measurement of behavior in the context of social systems. Prereq: For 4010, nine hours of sociology including SOC 1010. For 8016, permission of instructor.

4020/8026 Collective Behavior (3) Group and individual processes of social action and institution formation are studied. The development of special interest and political groups in society is examined. Prereq: For 4020, nine hours of sociology including SOC 1010. For 8026, permission of instructor.

4100/8106 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 method is elaborated as it pertains to data derived from community investigation. Prereq: For 4100, nine hours of sociology including SOC 1010. For 8106, permission of instructor.
4120/8126 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. (Same as GEOG 4120/8126)

4130/8136 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. Prereq: For 4130, nine hours of sociology including SOC 1010. For 8136, permission of instructor.

4140/8146 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. Prereq: For 4140, nine hours of sociology including SOC 1010 or permission of instructor. For 8146, permission of instructor. (Same as GEOG 4140/8146)

4150/8156 American Family Problems (3) (1) A theoretical treatment of the family as a social institution outlining the essential functions it provides for its members and the society. (2) An analysis of failures of function and attendant problems in a variety of American families: Parent-youth tensions, problems of sexual adjustment, role conflict, multiproblem families, desertion, divorce, others. Prereq: For 4150, three hours of sociology. For 8156, six hours of social science or permission of instructor.

4140/8146 Advanced Qualitative Methods (3) This course familiarizes students with contemporary qualitative methodologies and techniques by having them explore social and cultural relations in natural settings. Students will conduct individual and/or group field projects. Prereq: Permission of instructor.

4420/8426 Advanced Quantitative Methods (3) This course provides an advanced consideration of methodologies and techniques utilized in the generation and management of quantitative social science data. Students will gain first-hand involvement in the process of instrument construction and evaluation, building computer files and index scale construction and evaluation. Prereq: Permission of instructor.

4500/8506 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 couple's 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. Prereq: 4500/8506, six hours social science or human services or permission.

4530/8536 Seminar in Cross-Cultural Communication (3) This seminar will be directed towards understanding the components of cultural and subcultural misinterpretations, with the purpose of bringing to awareness those factors which distort communication in cross-cultural situations. Prereq: For 4530, junior and permission of instructor. For 8536, permission of Instructor. (Same as COMM 4530/8536)

4560/8566 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. Prereq: Permission of instructor.

4750/8756 Social Change (3) A discussion of theories and the basic models of change. Case and comparative examples from contemporary and historical change. Emphasis is placed on understanding causes and effects and larger trends current in American society and institutions. Prereq: For 4750, SOC 1010 and Junior or above. For 8756, permission of Instructor.

4920/8926 Team Research Seminar (3) Students participate in a semester-long class 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. Prereq: Permission of instructor.

4830/8836 Sociology of Mental Illness (3) The sociological perspective on mental illness is contrasted with other perspectives. The course covers the conceptualization of mental illness, diagnosis, 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. Prereq: Six hours social science or permission of instructor.

4850/8856 Sociology of Religion (3) Analysis of religious behaviors from a sociological and social-psychological perspective and utilizing both theoretical and empirical methods. The class is designed as an introductory approach to the sociology of religion, and the first in a two-step sequence, undergraduate and graduate. Prereq: For 4850, SOC 1010 or permission of instructor. For 8856, permission of instructor.

4990/8996 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. Prereq: For 4990, senior and permission of instructor. For 8996, permission of instructor.

8010 Sociological Theory I (5) 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. Prereq: Graduate; permission of instructor if outside department of sociology/anthropology.

8020 Sociological Theory II (5) 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. Prereq: Graduate; permission of instructor if outside department of sociology/anthropology.

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. Prereq: Graduate; a course in Statistics and Methods and permission of instructor.

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. Prereq: SOC 8020 or equivalent, and permission of instructor.

8050 Seminar in Social Psychology (3-6) Assigned reading, discussion, specialized individual work leading to the writing and presentation of a paper applicable to a general topic in social psychology selected by the instructor. As seminar topics change, this course may be repeated in a student's program without implying duplication. Prereq: Permission of instructor.

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. Prereq: Graduate and permission of instructor.

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. Prereq: Permission of instructor.

8530 Seminar in the Sociology of Religion (3-6) A seminar dealing with religion as a social and cultural phenomenon. The study theme will vary from time to time in keeping with the special interests of the instructor. As seminar topics vary, this course may be repeated in a student's program without implying duplication. Prereq: Permission.

8600 Seminar in Social Organization (3-6) 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. Prereq: Permission.
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. Prereq: Graduate and permission of instructor.

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. Prereq: Permission.

8830-8840 Interdisciplinary Seminar on the Urban Community (3-6) An interdisciplinary course on the metropolitan community in which various departmental and college offerings concerned with urban problems are put in broad interrelated focus. Prereq: Undergraduate major in one of the social sciences plus six hours of graduate work in one of the social sciences. (Same as GEOG 8830-8840, PSCI 8830-8840)

8850 Seminar in Urban Economics (3-6) An examination of the theoretical basis for the analysis of urban economic problems with emphasis upon the policy alternatives applicable toward their possible solution. Prereq: Undergraduate major in one of the social sciences plus six hours of graduate work in one of the social sciences. (Same as ECON 8850)

8950-8960 Practicum in Applied Sociology (Each 3) A practical work experience under supervision which provides opportunity for applying principles from the student's academic area of concentration. Prereq: Graduate sociology major for the MS degree.

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. Prereq: Graduate. (Same as GERO 9110)

9400 Seminar in Small Group Communication (3) Research and theory in the processes of small group communication and leadership, research procedures and approaches to teaching a discussion course. Prereq: COMM 8010 or equivalent, or basic statistics, or permission of instructor. (Same as COMM 9400)
SPECIAL EDUCATION AND COMMUNICATION DISORDERS

PROFESSORS:
Armfield, Hill, Wood

ASSOCIATE PROFESSORS:
Akers, Callahan, Christensen, Conway, Loresbach, Squires

ASSISTANT PROFESSORS:
Gilreath

Programs in Special Education and Communication Disorders are offered by the Special Education and Communication Disorders Department. Admissions examinations for programs in this department are identified in the General Information section of this catalog. Deadlines are as published.

Application for Admission
Student Responsibilities
1. Students must adhere to the admissions procedures and regulations which appear in the Special Information for Graduate Students section of this catalog.

2. The student must submit a current transcript of credits from a college or university showing a Bachelor's degree or its equivalent earned. The transcript must be submitted prior to admission. In addition to the transcript and an application for admission, the student must provide the department with:
   a. Two letters of reference from persons who know well the student's undergraduate academic work, the student's potential to do graduate work, and the student's professional competence;
   b. A personal letter of application covering such topics as interest, experience and career goals;
   c. Score on either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT).

3. Under unusual circumstances, the student may apply for temporary admission in the Mental Retardation and Emotionally Disturbed Programs. These students may be granted temporary admission if they submit a transcript of credits as outlined in number two above and, within the first eight weeks of the student's first semester, provide the department with all the documentation listed in sections 2a, b and c above. Students who do not complete the admission application process within the first eight weeks of the semester (two weeks in the summer) will be disenrolled.

4. Submission of all required materials and documentation is not a guarantee of acceptance to graduate school.

Graduate-Level Student Teaching/Practica
All students in this department must obtain the permission of the student's academic adviser prior to applying for and registering for student teaching or a practicum. The deadlines for submission of applications for student teaching/practica are March 15 for the following summer or fall semester placement, and October 15 for the subsequent spring semester placement. Students may be removed from their placement at the request of the student, department or school district/agency.

Special Education and Communication Disorders Programs

Master of Arts: Speech-Language Pathology
The Master of Arts degree with a major in speech-language pathology involves these requirements:

1. Admission to the University of Nebraska Graduate College.

2. The student must pass an examination to determine adequate personal voice and speech proficiencies and adequate hearing acuity for speech (administered at the Speech and Hearing Clinic of the University).

3. The student must have successfully completed a minimum of 39 semester hours of work preparatory to admittance to the major. These hours are to include the following courses or their equivalents:
   - SPED 1400 Introduction to Communication Disorders
   - SPED 4330 Aural Rehabilitation
   - SPED 4370 Basic Audiology
   - SPED 4380 Speech Science I: Speech Mechanisms
   - SPED 4390 Hearing Science
   - SPED 4420 Language Development in Children
   - SPED 4430 Articulation Disorders
   - SPED 4440 Rhythm and Symbolization
   - SPED 4490 Pre-Clinical Observation and Assessment in Speech Pathology
   - SPED 4450 Speech Science II: Experimental and Applied Phonetics
   - SPED 4500 Communication Disorders in the Elementary and Secondary Schools
   - SPED 4510 Basic Clinical Practicum in Speech Pathology
   - SPED 4750 Language Disorders in Childhood
   - PSYCH 2130 Statistics

4. For those students who wish to work toward a teaching certificate in Nebraska schools, adviser consultation should be sought early since additional coursework is required (this does not apply to those already holding state certificates in elementary or secondary teaching or a special services certificate in another field).

5. A minimum of 39 semester hours of coursework, thesis and practicum. These hours must include the following:
   - TED 8010 Introduction to Research
   - SPED 8420 Advanced Studies in the Disorders of Voice
   - SPED 8430 Advanced Studies in the Disorders of Rate and Rhythm
   - SPED 8440 Advanced Studies in the Disorders of Aphasia and Related Problems
   - SPED 8460 Diagnostic Methods in Communication Disorders
   - SPED 8470 Speech Science III: Neuropsychology of Speech and Language
   - SPED 8480 Advanced Audiology
SPED 8510 Advanced Clinical Practicum in Communication Disorders (Schools)
SPED 8520 Advanced Clinical Practicum in Communication Disorders (Hospitals and Rehabilitation Centers)
SPED 8530 Seminar in Speech Pathology
SPED 8990 Thesis (6 hours)

6. Students must present a thesis representing six semester hours of work and which is deemed satisfactory to the members of the committee, following oral examination. This examination is in defense of the thesis.

7. The student must pass the written comprehensive examination selected by the faculty.

Master of Science: Speech-Language Pathology

The Master of Science degree with a major in speech-language pathology involves these requirements:

1. Admission to the University of Nebraska Graduate College.

2. The student must pass an examination to determine adequate personal voice and speech proficiencies and adequate hearing acuity for speech (Administered at the Speech and Hearing Clinic of the University).

3. The student must have successfully completed a minimum of 39 semester hours of work preparatory to admittance to the major. These hours are to include the following courses or their equivalents:
   - SPED 1400 Introduction to Communication Disorders
   - SPED 4330 Aural Rehabilitation
   - SPED 4370 Basic Audiology
   - SPED 4380 Speech Science I: Speech Mechanisms
   - SPED 4390 Hearing Science
   - SPED 4420 Language Development in Children
   - SPED 4430 Articulation Disorders
   - SPED 4440 Rhythm and Symbolization
   - SPED 4450 Speech Science II: Experimental and Applied Phonetics
   - SPED 4500 Communication Disorders in the Elementary and Secondary Schools
   - SPED 4510 Basic Clinical Practicum in Speech Pathology
   - SPED 4750 Language Disorders in Childhood
   - PSYCH 2130 Statistics

4. For those students who wish to work toward a teaching certificate in Nebraska schools, adviser consultation should be sought early since additional coursework is required (this does not apply to those already holding state certificates in elementary or secondary teaching or a special services certificate in another field).

5. Thirty-nine semester hours of coursework and practicum. These hours must include the following:
   - Required Courses
     - TED 8010 Introduction to Research
     - SPED 8420 Advanced Studies in the Disorders of Voice

6. The student must pass the written comprehensive examination selected by the faculty.

Master of Science: Teaching the Hearing Impaired

The Master of Science degree in Teaching of the Hearing Impaired is based on the standards for professional preparation as promulgated by the Council on Education of the Deaf (CED). Graduates will be eligible for Provisional or Professional (depending on previous training and experience) Level Certification from CED. The program is approved by CED as a teacher preparation program.

Students in the Master's degree program will complete a core of coursework in hearing impairment and additional coursework in a related area. Coursework in related areas will be based on individual students' needs and professional goals. All coursework must be approved by the program(s) adviser(s).

The Master of Science degree involves the following requirements:

1. Admission to Graduate Studies at the University of Nebraska.

2. Program Admission
   In addition to the materials submitted in "1.", individuals applying for admission to the program also must meet the following requirements:
   - Have an undergraduate degree in teaching the hearing impaired; or hold valid certification/endorsement as a teacher of the hearing impaired; or have successfully completed the following courses or suitable equivalents:
I, complete a thesis, the program would require 42 semester hours shall be taken from the following:
1. Hours and would be extended accordingly. The required required. (Students may complete a thesis with the advice and consent of the faculty adviser. If a student elects to

PROGRAM REQUIREMENTS
A minimum of 39 hours of coursework and practica are required. (Students may complete a thesis with the advice and consent of the faculty adviser. If a student elects to complete a thesis, the program would require 42 semester hours and would be extended accordingly.) The required hours shall be taken from the following:
1. Required Courses - 24 hours
   TED 8010 Introduction to Research
   SPED 8200 Research in Hearing Impairment
   SPED 8240 Advanced Studies in Communication and Language
   SPED 8280 Sociological Impacts of Deafness
   SPED 8290 Learning and Literacy in the Hearing Impaired
   SPED 8350 Curriculum Development and Adaptation for the Hearing Impaired
   SPED 8480 Advanced Audiology
   SPED 8720 Practicum in Special Education
2. Elective Courses in Related Area - 12 hours
   Students must choose courses designated for graduate students only. Choices should reflect the interest and professional goals of the students and should constitute a concentration of work in a certain area. For example: administration and supervision; reading;

learning disabilities; special education; counseling. All coursework selected in a concentration area must be approved by the program advisor and must be included in the student's plan of study.

3. Other Electives - 3 hours
   Students may select any graduate-level courses in special education, hearing impairment or communication disorders. This may include courses offered at the University of Nebraska-Lincoln. Elective courses must be approved by the program advisor and must be included in the student's plan of study.

4. Competency in simultaneous communication (sign language) is required before practicum assignments will be initiated.

5. Students must pass a written comprehensive examination or complete the requirements for a thesis.

RETENTION REQUIREMENTS
QUALITY OF WORK STANDARD
Students must meet the "Quality of Work Standards" as specified in the Graduate Catalog. Students will be dropped from the Program for the following:
1. Failure to maintain an overall GPA of 3.0 in graduate work.
2. Failure to achieve a grade of "B" or better in each required course. (See Section 1 in the Program Requirements.)
3. Receiving nine (9) hours of graduate credit with a grade of "C" or "C+.
4. Receiving a grade less than "C" in any courses included in the plan of study.

Master of Arts: Mental Retardation
The Master of Arts degree with a major in Mental Retardation is a program designed for a person wanting to focus his/her graduate study in the area of mental retardation with an emphasis on investigating a research project through the completion of a thesis. Any student seeking an endorsement must complete all certification requirements in addition to the six hour thesis. A written examination is not required of students in this program. Students will be required to answer questions about coursework completed in the master's degree program during their thesis defense.

The Master of Arts degree with a major in Mental Retardation involves these requirements.
1. Admission to the University of Nebraska Graduate College.
2. Required Courses
   TED 8010 Introduction to Research .................... 9
   SPED 8030 Special Education Alternatives ............ 3
   SPED 8600 Introduction to Mental Retardation ........ 3
   SPED 8900 Thesis ..................................... 6
   The remaining courses will be selected in consultation with the adviser. Students may take all of their coursework in mental retardation and related courses or may take 15 to 18 hours in mental retardation and six (6) to nine (9) hours in a minor area of interest.

NOTE: Students in graduate studies who have "unclassified" status or who have been admitted to another graduate degree program still must satisfy all requirements ("a," and "b") before they will be considered for admission to the Master's program in Hearing Impairment.
Master of Science:
Teaching the Mentally Retarded

The Master of Science degree with a major in teaching the mentally retarded provides opportunities for students who wish to develop and expand their competencies in teaching mentally retarded children and youth. Upon successful completion of the Master of Science degree, the student will be recommended for the State of Nebraska certification in mildly/moderately handicapped. This certification program is for kindergarten through high school. Students will sit for comprehensive examinations after completing coursework, excluding elective coursework. The Master of Science degree in Mental Retardation is a minimum of 36 credit hours and at least 18 hours must be in 800 level courses.

The Master of Science degree with a major in teaching the mentally retarded involves these requirements:
1. Admission to the University of Nebraska Graduate College.
2. Bachelor's degree with a valid teaching certificate or completion of the necessary deficiencies to hold certification.
3. Required Courses:
   - TED 8010 Introduction to Research .................3
   - SPED 8030 Special Education Alternatives........3
   - SPED 8236 Language Development and Disorders for Teachers..............3
   or SPED 8240 Advanced Studies in Communication and Language....................3
   - SPED 8606 Introduction to Mental Retardation ......3
   - SPED 8646 Methods and Materials in Special Education ................3
   - SPED 8656 Career Development for the Handicapped .............3
   or SPED 8666 Developing Vocational Training Programs for the Seriously Handicapped ..........3
   - SPED 8716 Interaction Between Professionals and Parents of the Handicapped ..........3
   - SPED 8806 Emotional Development of Children and Youth ..........3
   - SPED 8816 Classroom Techniques for Behavior Control ........3
   - SPED 8720 Basic Student Teaching* ...............3
   - SPED 8730 Advanced Student Teaching ..........3
   - SPED 8910 Theory of Assessment and Diagnosis of Learning Deficits ..........3

*Student Teaching Notes: To meet K-12 certification, students with only elementary certification will be required to student teach at the secondary level. Students with only secondary certification will be required to teach at the elementary level. Those students with K-12 certification will selecting a site in consultation with their advisor. However, the student teaching requirement (SPED 8720) may not be fulfilled in the student's own classroom.

Master of Science:
Teaching the Emotionally Disturbed

Students completing the Master of Science degree with a major in teaching the emotionally disturbed will be prepared to design, implement and evaluate educational programs for children and youth who have been identified as behaviorally disordered or emotionally disturbed and to consult with the teachers of such children and youth. Students completing this program will meet the State of Nebraska certification requirements for behaviorally disordered, and upon completion of the program and two years of successful teaching, will be recommended for endorsement to teach preschool through high school levels. Thirty-six hours must be completed for the Master of Science degree in Teaching the Emotionally Disturbed.

A written comprehensive examination is not required of students choosing the thesis option. Thesis option students will be required to answer questions about coursework completed in the Master's program during their thesis defense.

The Master of Science degree with a major in teaching the emotionally disturbed involves these requirements:
1. Admission to the University of Nebraska Graduate College.
2. Bachelor's degree with teaching certificate in one or more teaching areas or completion of the necessary deficiencies to hold certification.
3. Have completed courses in learning theory (3 hours), curriculum development (3 hours), Psychology of the Exceptional Child (3 hours) and student teaching (3 hours).
4. Required Courses:
   - TED 8010 Introduction to Research .................3
   - SPED 8236 Language Development and Disorders for Teachers...............3
   - SPED 8656 Career Development for the Handicapped ........3
   - SPED 8666 Developing Vocational Training Programs for the Seriously Handicapped ..........3
   - SPED 8716 Interaction Between Professionals and Parents of the Handicapped ..........3
   - SPED 8806 Emotional Development of Children and Youth ..........3
   - SPED 8816 Classroom Techniques for Behavior Control ........3
   - SPED 8720 Basic Student Teaching* ...............3
   - SPED 8730 Advanced Student Teaching ..........3
   - SPED 8910 Theory of Assessment and Diagnosis of Learning Deficits ..........3
   - SPED 8840 Advanced Practicum in Teaching the Emotionally Disturbed ..........3
   - SPED 8850 Practicum in Teaching the Emotionally Disturbed ..........3
   - SPED 8850 Practicum in Teaching the Emotionally Disturbed ..........3
   - SPED 8840 Advanced Practicum in Teaching the Emotionally Disturbed ..........3
   - SPED 8400 Introduction to Learning Disabilities ..........3
   - SPED 8910 Theory of Assessment and Diagnosis of Learning Deficits ..........3

Available:
   - SPED 8990 Thesis (thesis option only) ..............6
Master of Science: Resource Teaching and Learning Disabilities

Resource Teaching and Learning Disabilities is a specialized training program designed to prepare the graduate student to identify, diagnostically analyze and teach children who have specific learning deficits within a cross-categorical resource classroom setting. The student should enter the program with a background in learning theory, child growth and development, curriculum development, and methods and techniques of teaching. Upon successful completion of the program and two years of successful teaching experience, students will be recommended for the Resource Teaching and Learning Disabilities endorsement in grades preschool through high school offered by the State of Nebraska. The student in the non-thesis option will sit for comprehensive examinations after completing 28 hours of coursework, excluding selected elective coursework, advanced student teaching and the school practicum. A written comprehensive examination is not required of students choosing the thesis option. Thesis option students will be required to answer questions about coursework completed in the Master's program during their thesis defense.

Thirty-seven hours must be completed for the Master of Science degree. Students electing a resource teaching and learning disabilities thesis option will complete a 40 hour program by taking SPED 8990 Thesis for six (6) credits rather than equivalent electives.

The Master of Science degree with a major in resource teaching and learning disabilities involves these requirements:

1. Admission to the University of Nebraska Graduate College.
2. Bachelor's degree with a valid teaching certificate from a state education agency or completion of the deficiencies necessary to meet certification.
3. Meet with the adviser for an interview before the first semester of coursework.
4. Show evidence of successful completion of courses which are related to child development (3 hours), learning theory (3 hours), curriculum development (3 hours), student methods courses (3 hours) and student teaching (3 hours) or equivalent.
5. Maintain at least a "B" in each course of the first 12 hours of coursework.
6. Required Courses:
   - TED 8010 Introduction to Research ........................................ 3
   - SPED 8030 Special Education Alternatives ......................... 3
   - SPED 8656 Career Development for the Handicapped .......... 3
   - SPED 8806 Emotional Development of Children and Youth .................. 3
   - SPED 8816 Classroom Techniques for Behavior Control .................. 3
   - SPED 8400 Introduction to Learning Disabilities ....... 3
   - SPED 8730 Advanced Student Teaching (Preschool-12) ........... 3
   - SPED 8910 Theory of Assessment and Diagnosis of Learning Disabilities ........... 3
   - SPED 8930 School Practicum in Resource Teaching/Learning Disabilities* .................. 3
   - SPED 8960 Advanced Diagnosis of Learning Disabilities (Prerequisite SPED 8910) ........ 4
   - SPED 8970 Clinical Teaching in Learning Disabilities ........ 3
   - SPED 8990 Thesis (thesis option only)* .................. 6
   - Elective (non-thesis option only) ........................................ 3

*Student must have practicum experience at a level other than their current certification. If a student teaches at the secondary level, the Advanced Student Teaching (Learning Disabilities Clinic UNO) practicum must be with preschool through sixth grade-level children.

**The thesis will be completed for six hours of credit, making the program 40 hours.

Course Descriptions

4010/8016 Child Abuse/Neglect: What You Can Do (3) This course has been developed in conjunction with the Professional Interrelations Committee of the Child Abuse Council of Omaha. It is aimed at providing professionals in the greater Omaha area with skills necessary to recognize children who are abused and/or neglected as well as acquaint them with the wide array of services available to the abused/neglected child and the family.

4020/8026 Using Microcomputer Software in Special Education (3) This course is intended for educators working with special education students. Students will learn about and how to use software to assist in providing services to special education students. They will be taught to evaluate software in the area of special education and will participate in evaluating software that they should be using. Students will learn about software that would assist them in assessment and remediation including information on report writing, prescription and record keeping.

4030/8036 Use of Paraprofessionals in Special Education (3) This course is designed to familiarize students and professionals with the use of paraprofessionals in Special Education. Topics of concern will include local, state and national guidelines, legal issues, supportive data and effective implementation strategies. Prereq: None.

4040/8046 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 or speech pathology. Prereq: Determined by instructor.

4100/8105 Psychology of Exceptional Children (3) A study of exceptional children and adolescents with sensory or motor impairments, intellectual retardations or superiorities, talented or gifted abilities, language or speech discrepancies, emotional or behavioral maladjustments, social or cultural differences or major specific learning disabilities. (Same as PSYCH 4590/5556)

4110/8116 Assessment and Curriculum in Cognitive Development for the Severely/Profoundly Handicapped (3) This course will involve a combination of lectures, demonstrations and practicum experiences designed to prepare the student to be able to assess cognitive development in the severely handicapped student, and apply that information to the development of individual educational plans for severely handicapped students. The course will include weekly presentations and practicum. Prereq: For 8116, permission of instructor. For 4110, junior in special education, PSYCH 1010 or PSYCH 3510, CORE 2100, 2200, 2800 or equivalents, and permission of instructor.

4220/8226 Teaching Speech to Hearing-impaired Students (2) An investigation of the speech of the hearing-impaired child, preschool through high school, and exposure to the theory and methods used to assess and develop these skills in the classroom. Prereq: SPED 4450 and 8456.
4320/8236 Language Development and Disorders for Teachers (3) An investigation of the nature and structure of language, acquisition of language and childhood disorders. This course is designed for undergraduate/graduate students who are teachers or are preparing to be regular and/or special education teachers. Prereq: None.

4330/8336 Aural Rehabilitation (3) This course examines the research and methodology of speech reading and auditory training as they pertain to the hearing-impaired child. Practice with and evaluation of popular tests and methods are experienced in a practicum setting. Types of aids and FM systems and techniques of troubleshooting these units also are presented. Prereq: SPED 8306 and 8376.

4370/8376 Basic Audiology (3) Study of the pathologies of the auditory system and assessment of auditory disorders. Emphasis will be on various practical aspects of audiology for the communication disorders specialist. Competency will be acquired in performance of basic hearing tests. Prereq: For 4370, SPED 4390 and 2.5 GPA. For 8376, SPED 8396.

4380/8386 Speech Science II: Speech Mechanisms (3) This course is an introduction to speech and hearing science and will present anatomy and physiology of the human communicative process. The mechanisms of respiration, phonation and speech articulation will be explored from the biological standpoint. The course is designed primarily for students in speech pathology, education of the hearing impaired, special education and those teachers who work with the handicapped in education or rehabilitation settings. Prereq: For 4380, junior and 2.5 GPA.

4390/8396 Hearing Science (3) This course is designed for undergraduate majors in speech pathology and audiology and for graduate students in education of the deaf. The purpose of the course is to introduce basic concepts important for understanding the process of human audition. 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 measurement, psychophysics. Prereq: For 8396, Graduate major in Deaf Education. Not available to Speech Pathology majors as a graduate course.

4410/8416 Communication Disorders with Organic Etiologies (3) This is a graduate-level course in applied basic science and clinical methods related to several of the most common communication disorders associated with organic etiologies. It is designed as an elective course in the masters degree path of language and for post-masters education for practicing speech clinicians desiring a graduate-level overview of these topics. Prereq: Undergraduate degree in speech pathology or permission of instructor.

4420/8426 Language Development in Children (3) This course is designed to familiarize the student with normal aspects of language development in children, including inter and intrapersonal forces in language, major subsystems of language and non-verbal and pragmatic aspects of language development. Prereq: None.

4440/8446 Rhythm/Symbolization (3) Study of etiology and descriptive classifications of rhythm and language symbolization disorders; assessment procedures; with special emphasis on rehabilitation procedures and methods associated with stuttering, cluttering, organic dysprosody and aphasia. Prereq: For 4440, 2.5 GPA. (Fall, Summer)

4450/8456 Speech Science III: Experimental and Applied Phonetics (3) Analysis of phonetics and phonetic elements in major American English dialects; practice in transcription of standard and defective speech, use of the sound spectrograph, spirometer and other equipment. Prereq: For 4450, junior, 2.5 GPA. (Fall, Summer)

4500/8506 Disorders of Communication in Older Adults (3) This course is designed to familiarize the student with the identification and symptomology, 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. Students are assigned contacts with and written reports of contacts with an elderly adult who manifests a disorder of communication. Prereq: GER 4500/8506 or permission of instructor. (Same as GER 4500/8506)

4640/8646 Methods and Materials in Special Education (3) Individualized instruction and selection of appropriate methods and materials to meet educational programming needs for the mildly/moderately handicapped. Prereq: For 4640, junior, 2.5 GPA, SPED 3030. For 8646, graduate.

4650/8656 Career Development for the Handicapped (3) Curriculum oriented for teachers and related professionals to work with the career development of handicapped individuals. Includes information for elementary through adulthood with emphasis on intermediate and junior high school levels. Prereq: None. (Same as GERO 8656)

4660/8666 Developing Vocational Training Programs for the Severely Handicapped (3) Directed toward teachers of secondary, post-secondary and adult handicapped persons to utilize vocational evaluative information, to develop training programs for seriously handicapped youth and adults, and to compare various curriculum models for serving seriously handicapped youth and adults. Prereq: None.

4710/8716 Interactions Between Professionals and Parents of the Handicapped (3) This course includes interviewing parents of handicapped children, identifying both family and professional concerns, and a student project in one of four areas: (1) challenges of parenting the handicapped; (2) strategies for modifying and evaluating handicapped child education plans; (3) curricular/curriculum instruction/therapy modification for family use; and (4) professionals dealing with families of the handicapped. Undergraduate students will work with a family as the family goes through the process of obtaining appropriate services for their handicapped child. Prereq: For 4710, SPED 3010, 3020, 3030.

4750/8756 Childhood Language Disorders (3) This course is designed to cover the various problems involved in language acquisition among exceptional children; and the various methodological techniques of teaching language to exceptional children. Prereq: SPED 4420 and 2.5 GPA.

4800/8806 Emotional Development of Children and Youth (3) The study of psychological, biological and environmental factors that affect social and emotional development of children and adolescents. Emphasis is placed on causative emotional handicaps, symptoms and subsequent implications for design of the learning environment. Prereq: For 4800, SPED 3010 and junior. (Same as Curriculum and Instruction)

4810/8816 Classroom Techniques for Behavior Control (3) This course will introduce the student to a variety of techniques for managing behavior in the classroom. Three major areas will be presented and specific techniques within each will be practiced both in the class and in the student's own teaching situation. Applications and adjustments of techniques will be accomplished in class. The course is intended for undergraduate students who are currently enrolled in student teaching and for graduate students who are currently teaching in elementary, secondary or special education programs. Prereq: For 4810, junior and student teaching. For 8816, graduate.

8000 Special Projects (1-6) Seminars, workshops or independent studies on specific topics.

8020 Special Education Alternatives (3) This course meets the requirements of Nebraska Statute 79-1247.16 (LB 392). The provision of unique educational or alternative responses to students with extraordinary educational needs is considered in both regular education and least restrictive educational environments. Definition, identification, diagnosis, referral and educational planning for exceptional learners will be applied to techniques of classroom management, adaptations and referral processes. Prereq: Graduate.

8040 Communication Disorders for Classroom Teachers (3) This is a service course for the classroom teacher. It provides the following: identification of the children, referral within and outside the school setting, legal considerations, utilizing the speech-language specialist as a resource, management techniques for teachers, and teachers' roles on Student Assistance Teams (SAT) or Multidisciplinary Teams (MDT), and similar topics. Prereq: Graduate.

8100 Research Projects (3) Individual or group study and analysis of specific problems.

8130 Diagnostic and Remedial Instruction In Reading (3) A course for advanced students in reading which will provide the student with the essential information for the diagnosis and remediation of reading disabilities. Prereq: SPED 9110 or 9120.

8140 Measurement and Evaluation of Reading (3) A clinic-oriented course for advanced graduate reading students which will provide them with supervision and training in handling referrals, diagnosing specific reading problems, writing professional-level case reports and general practices that are necessary for running an effective diagnostic reading clinic. Prereq: SPED 8130. (Fall, Spring)
8150 Clinical Practice in Reading (3) A laboratory-oriented course for advanced students in reading which will provide them with practical training in the use of proper remedial reading techniques so they might qualify as reading specialists. Prereq: Permission and SPED 8140.

8200 Research in Hearing Impairment (3) This course will provide a comprehensive review of current research in the field of hearing impairment. Research in psycho-socio-emotional factors, communication development, educational issues, and related areas (audiology, speech, and/or rehabilitation) will be covered. In addition, the course will emphasize the use of ethnography (including the collection and analysis of videotaped data) in research with the hearing impaired. Prereq: Graduate, permission of instructor.

8240 Advanced Studies in Communication and Language (3) This course will provide an in-depth study of the development and use of symbol systems as means of communication. The course will focus on the development and use of communication in various language and learning situations. In addition, formal and informal means of assessment, along with adaptations of curriculum and instructional strategies, will be covered. Alternative and augmentative systems of communication will be examined. Prereq: Graduate, permission of instructor.

8280 Sociological Impact of Deafness (3) The course deals with the sociological impact of hearing impairment as they relate to individuals' participation in society. Four major aspects of social participation will be examined: family relationships, educational environments, personal-social characteristics and vocational opportunities/implications. Prereq: None.

8290 Learning and Literacy in the Hearing Impaired (3) This course will examine current research on the development of reading-writing in normal hearing and hearing-impaired children. Practical application of research information to classroom instruction will be stressed. Participation in ongoing, classroom-based "writing and reading workshops" will be part of the course.

8340 Seminar in Pediatric Audiology (3) The course is designed for graduate majors in speech pathology, audiology and education of the hearing impaired. It has a seminar format with several guest lecturers. Topics to be covered include behavioral audiometry, immittance tests, speech-perception tests, electrophysiologic tests, amplification problems, habilitation of the hearing impaired, hearing and immittance screening and techniques for evaluating the difficult-to-test. Prereq: SPED 8460 or permission.

8350 Curriculum Development and Adaptation for the Hearing Impaired (3) This course examines principles of curriculum design and development as they apply to hearing-impaired students. Curriculum needs unique to residential schools, public school programs (containing classroom, resource room, itinerant services) and early intervention programming will be emphasized. Sources of special instructional materials, including computer software, and techniques for designing and/or adapting instructional materials for use with hearing-impaired students will be examined. Prereq: Graduate.

8400 Learning Disabilities (3) Study of specific learning disabilities among children; review problems of terminology, criteria and definition; causal factors of learning disabilities; evaluative techniques for identification of the problem; therapy techniques for habilitation or rehabilitation of children with specific learning disabilities.

8420 Advanced Studies in the Disorders of Voice (3) Types and causes of voice disorders; rationale for case selection; cleft palate; special emphasis on rehabilitation procedures associated with individual involvements; practicum. (Fall)

8450 Current Practices in Speech Pathology (3) This course provides for study and experience in speech therapy programming utilizing behavior modification techniques based on Skinnerian-behaviorist principles. It includes a review of current literature and emphasizes operant articulatory and language remedial procedures. Prereq: SPED 8506. (Summer)

8460 Diagnostic Methods in Communication Disorders (3) Tests and procedures for evaluating individuals with speech disorders; principles in differential diagnosis and report writing; observation during evaluation periods in speech and hearing centers. Prereq: Graduate and six hours of speech pathology. (Fall)

8470 Speech Science III: Neurophysiology of Speech and Language (3) Introduction to human neuroanatomy and neurophysiology. Emphasis is placed on gaining familiarity with the brain mechanisms and sensory and motor functions which underlie human communication and its disorders; individual projects. (Fall, Summer)

8480 Advanced Audiology (3) This course is intended for graduate students majoring in speech pathology. It is designed to present information pertinent to clinical certification of the speech pathologist. Course content includes specialized techniques applicable to the assessment and diagnosis of auditory dysfunction. Application of basic hearing techniques combined with special tests for assessment of site of lesion will be stressed. The use of case histories, biological considerations, identification of hearing loss and equipment maintenance will be considered. Prereq: SPED 4570.

8500 Basic Clinical Practicum in Speech Pathology (3) This course in practicum follows the course 4510 which is the student's first experience in clinical practicum. It is designed to give graduate students who need more than one semester of closely supervised practicum an opportunity to get this experience before being placed in a rotation away from the university. Prereq: Permission and SPED 4510 or equivalent.

8510 Advanced Clinical Practicum in Communication Disorders (Schools) (3) This course provides the student with an "externship" experience for clinical practicum in a school setting with a cooperating clinician serving children in a typical school program. A minimum of 130 clock hours of work is required for credit. Prereq: SPED 4510 and graduate.

8520 Advanced Clinical Practicum in Communication Disorders (Hospitals and Rehabilitation Centers) (3) The second semester of advanced clinical practicum. The student is placed in an "externship" setting with a cooperating clinician working in a hospital, rehabilitation center or a unique school program serving a special population of children. A minimum of 130 clock hours of work is required for credit. Prereq: SPED 4510.

8540 Clinical Practicum in Communication Disorders (Schools) (3) This course will provide the student with an "externship" experience for clinical practicum in a school setting with a cooperating clinician serving children in a typical school program. A minimum of 130 clock hours of work is required for credit. Prereq: SPED 4510 and graduate.

8550 Microbiology (3) This course is designed to expose students to the problems of communication by which the child with a defect of the palate is confronted. Developing competencies for remediation procedures and methods will be the primary aim of the course. (Spring)

8555 Speech problems of Cerebral Palsey Children (3) Identification of types of cerebral palsy by location of lesion, motor symptomatology, and additional handicaps; the role of the speech clinician on the team; types of speech therapy, with special emphasis on the Bobath approach; current research and controversial issues will be discussed. Prereq: SPED 8470. (Spring)

8560 Mental Retardation (3) This course is to provide an overview of mental retardation using a perspective that includes historical, sociological, anthropological, philosophical, psychological and educational elements. The thrust will be to show how mental retardation fits into the culture at large. An attempt is made to show the holistic integration of retardation in the culture of the United States.
8610 Teaching Severely/Profoundly Handicapped (6) This course/workshop is intended for special educators and educational/medicine support personnel (PT, OT, Speech Path) working with students with severe, profound or multiple handicaps in school settings. This course is designed to familiarize students with concepts, terminology, professional issues, resources and teaching strategies as a basis for professional communication and educational programming for this handicapped population. Particular emphasis will be placed upon developmental content in the areas of motor, cognitive and communication development for development ages birth to five years. Prereq: SPED 4600/8600.
8650 Curriculum Planning for the Disabled (3) This is a modular competency-based course where students study the terminology of curriculum, its goals and aims, objectives and taxonomies, curricular development, units and lesson plans, task analysis assessment and evaluation, and programming. Projects, small-group discussion and a final test make up the evaluation techniques used in this class.
8670 Methods of Instruction for the Severely/Profoundly Handicapped (3) This course will involve a combination of lectures, demonstrations and practicum experiences designed to prepare the student to be able to concretize assessment principles into written behavioral objectives and written task analysis. Demonstration of competency in course objectives will be evidenced by collecting, measuring and graphing data on the written objectives and tasks. Prereq: SPED 8600, 8650 or permission of instructor.
8680 Sensory Disabilities and Physical Handling In the Multiply Handicapped Child (3) This course will include overviews of typical sensory development and physical handling, including the discussion and illustration of educational implications of sensory disabilities and motor problems in the child with multiple handicaps. Application of principles to educational intervention will be stressed. Prereq: SPED 8650 or equivalent or permission of instructor.
8700 Seminar in Special Education (3) Graduate course for professional workers who provide services for exceptional persons. Each seminar will be conducted around a theme concerned with current professional practice. Participants will each prepare a project which includes practical research, a written paper and presentation to the class. Lecture by the instructor and guests will be related to the seminar theme. Prereq: Graduate in a field of social science.
8720 Basic Student Teaching (3) Classroom experience with exceptional children for graduate students who have had other professional experiences. Students will participate in observation, participation, teaching and a weekly seminar.
8730 Advanced Student Teaching (3) A second semester of classroom experience with exceptional children for graduate students who have had other professional experiences. Students will participate in observation, participation, teaching and a weekly seminar. Prereq: SPED 8720.
8770 Basic Practicum in Special Education (3) This course provides participation in various clinical or classroom situations in the field of special education. The course is open to all students in all areas of special education. Assignments will be made according to the area of interest of the student. Prereq: SPED 8720. (Spring)
8780 Advanced Practicum in Special Education (3) A second semester of participation in various clinical or classroom situations in the field of special education. The course is open to all students in all areas of special education. Assignments will be made according to the area of interest of the student. Prereq: SPED 8720, 8816.
8720 Educational Strategies for Emotionally Disturbed Children and Adolescents (3) This course is designed for the professional teacher who is teaching or preparing to teach emotionally disturbed children and adolescents. The course will examine the causes and characteristics of a variety of maladaptive behaviors with a view toward identifying the child's needs and stressing the design of educationally therapeutic response systems. Prereq: SPED 8406, 8806, 8816.
8830 Practicum in Teaching Emotionally Disturbed (3) A semester of participation in a classroom situation in the field of teaching emotionally disturbed children and adolescents. Prereq: SPED 8806, 8816 and permission.
8840 Advanced Practicum in Teaching Emotionally Disturbed (3) A semester of participation in a clinical or hospital classroom situation in the field of teaching emotionally disturbed children and adolescents. Prereq: SPED 8820 and permission.
8870 Diagnostic and Remediation Techniques in Early Childhood Education for the Disabled (3) This course deals with the different disciplines used at the Medical Center presenting some of their techniques for assessing the developmentally disabled child and also presenting methods that can be utilized in intervention with the developmentally disabled child. Prereq: TED 8090. (Spring)
8900 Administration and Supervision of Special Education (3) The purpose of this course is to provide the student with the basic information needed to administer and supervise an educational program for handicapped students. The course will also provide an opportunity to study in greater detail legal issues at the state and federal level and current legislation related to special education administration and supervision.
8910 Theories of Assessment and Diagnosis of Learning Deficits (3) This course introduces the graduate student to a model assessment and diagnosis that describes both the quantitative and qualitative relationship between learning ability and academic achievement. Prereq: None.
8930 School Practicum in Resource Teaching/Learning Disabilities (3) This course provides the graduate student with either in-service or placement in a school program for the learning disabled or in a resource room setting and at a level commensurate with the student's desired level of endorsement (pre-school, kindergarten, elementary, middle school or secondary). Prereq: Step I and permission.
8960 Advanced Diagnosis of Learning Deficits (4) The purpose of this course is to provide the student with in-depth practicum experiences in the administration and interpretation of normative referenced evaluative measures (non-psychological), criteria-referenced tests and informal diagnostic teaching probes. Prereq: SPED 8910.
8970 Clinical Teaching in Learning Disabilities (3) Theoretical and limited practical knowledge of a particular kind of teaching which is to tailor learning experiences to the unique needs of children who have specific learning disabilities. The student learns the fexibilities and continuous probing needed for individualized instruction. Prereq: None.
8990 Thesis (1-6) Required of all students taking Master of Arts degree. See major adviser for information.
TEACHER EDUCATION

PROFESSORS:
Bunsen, Dick, Freund, Grandgenett, Haselwood, Howell, Jarmin, Lickteig, Selee, Ziebarth
ASSOCIATE PROFESSORS:
Bressler, Holmqquist, P. Kolasa, Langan, Mortenson, Parnell, VanEvery
ASSISTANT PROFESSORS:
Gill, K. Smith, Tixier y Vigil

The Department of Teacher Education offers graduate degrees in Elementary Education, Reading, Secondary Education and Urban Education. In addition, graduate concentrations are available leading to certification or endorsement in Educational Media, Gifted Education, Vocational Education and Special Vocational Needs.

Admission Requirements
The requirements for unconditional admission into a graduate degree program are as follows:
1. A valid teaching certificate, except for Urban Education
2. An undergraduate major GPA of 3.0 or above
3. Completion of undergraduate deficiencies
4. An acceptable score on one of the following (must be completed before a second enrollment in classes):
   a. Graduate Record Examination - minimum score of 840 on the Verbal and Quantitative sections
   b. Graduate Record Examination - minimum score of 1260 on the Verbal, Quantitative and Advanced Test in Education
   c. Miller Analogies Test - minimum raw score of 35

Comprehensive Examination
Students who seek the Master of Science degree must take a written Comprehensive Examination. This examination is taken at or near the completion of all coursework required in the approved Plan of Study.

Non-Degree-Seeking Students
Students who are not planning to pursue a program leading to a Master's degree are allowed to take courses for which they meet the prerequisites. Their graduate adviser will confer with them in planning for such courses. Students not pursuing a graduate degree will be admitted as unclassified graduate students. Normally, no more than six hours taken as an unclassified student may be transferred into a graduate degree program.

Elementary Education
Master of Arts
The Master of Arts degree in Elementary Education requires 30 hours of coursework. This program allows for individualization and provides an opportunity for in-depth study in an area of interest. A Master's thesis is required and is included within the 30 hours. Programs for the Master of Arts degree in Elementary Education will be determined in consultation with the major adviser.

Master of Science
Degree Program
1. Required Courses ................................ 21 hours
   TED 8010 Introduction to Research
   TED 8020 History and Philosophy of Education
   TED 8030 Seminar: Education-Elementary
   TED 8060 Current Issues and Trends in Education
   TED 8360 Diagnostic and Corrective Instruction
   TED 8430 School Curriculum Planning
   EDAD 8460 Administration and Supervision in Elementary Schools
2. Area of Concentration ................................ 9-12 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. All concentrations will be decided upon in conference with the student's departmental adviser. Possible choices include: Reading, Early Childhood Education, Gifted Education, Guidance, Improvement of Instruction, Learning Disabilities, Urban Education, Educational Administration, Educational Media, or an academic concentration, e.g., history, English, mathematics.
3. Electives ........................................ 3-6 hours
   Total Hours Required (minimum) ................ 36 hours

Reading
Master of Science
The Master of Science degree with a major in reading conforms to standards of the International Reading Association for the professional training of Reading Specialists. Upon successful completion of the program, the student is recommended for K-12 endorsement in reading in Nebraska.
1. Core Professional Courses ....................... 18 hours
   TED 9110 Principles and Practices in Elementary Reading
   TED 9120 Teaching Reading in the Secondary School
   TED 9170 Seminar: Organization and Administration of Reading Programs
   or
   TED 9180 Seminar: Research in Reading
   SPED 8130 Diagnostic and Remedial Instruction in Reading
   SPED 8140 Measurement and Evaluation of Reading
   SPED 8150 Clinical Practice in Reading
2. Related Professional Courses .................... 6 hours
   Including Introduction to Research and selected work in such areas as foundation and general education, teacher education, special education, and psychology.
3. Related Cognate Courses ....................... 12 hours
   Including selected work in such areas as guidance and counseling and/or the various subject areas mentioned under sections 1 and 2.

Secondary Education
Secondary Education students may earn the Master of Arts degree or the Master of Science degree. Professional certification and/or additional endorsements may be earned as a part of both degree programs by developing an appropriate Plan of Study in consultation with an adviser.
Master of Arts
1. Required Courses ........................................ 15 hours
   TED 8010 Introduction to Research
   TED 8030 Seminar: Education-Secondary
   TED 8330 Analysis of Teacher Behavior
   TED 8410 Improvement of Instruction
   TED 8430 School Curriculum Planning
2. TED 8990 Thesis ........................................... 6 hours
3. Related Professional/Academic Courses .... 9 hours

Master of Science
1. Required Courses ........................................ 15 hours
   TED 8010 Introduction to Research
   TED 8030 Seminar: Education-Secondary
   TED 8330 Analysis of Teacher Behavior
   TED 8410 Improvement of Instruction
   TED 8430 School Curriculum Planning
2. Related Teacher Education Courses .......... 6 hours
3. Related Professional/Academic Courses .... 15 hours

Urban Education
Master of Science
   The Master of Science program in Urban Education is designed for graduate students who are interested in exploring the contemporary issues confronting urban educational institutions. The range and depth of the inter-disciplinary course offerings in this program provide varied, challenging and relevant experiences for both classroom teachers and community workers in allied professional fields. Students in this 36-hour program will increase their competence and expertise in functioning not only in the educational setting of the urban classroom, but also within the wider community milieu.

   It is expected that students will be able to critically analyze the logic and structure of the educational institution, and interrelationship of education and other primary socializing agencies.

   Many of the courses offered in the program are designed specifically to facilitate an analysis of the ethnic, racial, and social characteristics of the contemporary urban scene.

   It also is expected that students will develop an awareness of and the ability to handle the learning problems of urban youth. The program emphasizes a cultural awareness and appreciation of the varied lifestyles within the urban setting, and specific skills to function effectively as an educator. In addition, attention will be focused on a critique of existing programs and the development of new strategies for change and the improvement of education.

1. Required Courses ........................................ 18 hours
   TED 8010 Introduction to Research
   TED 8020 History and Philosophy of Education
   TED 8030 Seminar: Education-Urban
   TED 8150 Education and Society
   TED 8170 Alternative Strategies for Education
   TED 8190 The Urban School

2. Select from any of the following .................... 6 hours
   TED 8086 Mental Health for Teachers
   TED 8226 Growth and Learning Problems of the Disadvantaged
   TED 8130 Field Research Techniques in Urban Education
   TED 8150 Comparative Education
   TED 8190 Conflict and Controversy in Urban Education
   TED 8200 Anthropology and Urban Education

3. Electives (to be determined by the student and the adviser) ......................... 12 hours

Course Descriptions
4070/8076 Education for the Uncertain Tomorrows (3) It is the intent of this course to offer educators the opportunity to become aware of basic principles in the field of future studies, the tools available to futurists, the projections for education in the future, future-oriented learning, what they can do to teach a course on future studies, and how they can integrate the future into their personal and professional lives. Prereq: None.
4080/8086 Mental Health for Teachers (3) A study of the principles and practices conducive to good mental health in the classroom. Major emphasis is given to the teacher's role in providing an environment that will foster learning to relate to others and learning about oneself. Secondary emphasis is placed upon communication phenomena and the impact of institutions and authority structures upon mental health. Prereq: Junior or senior.
4220/8226 Growth and Learning Problems of Disadvantaged (3) An intensive study designed to help students develop a basic understanding of child growth and development and learning problems of the disadvantaged children and youth. Prereq: Senior.
4240/8246 Parent Involvement in Early Childhood Education (3) This is a course for classroom teachers and teachers-in-training to learn to work effectively with parents. The course will examine the purposes and methods of several approaches to parent-teacher relations and help students become familiar with and develop the skills necessary for the planning, design, implementation and evaluation of effective parent involvement components in early childhood settings. Prereq: Admission to teacher education, CORE 1500; TED 2250; or graduate.
4270/8276 Current Trends in Early Childhood Education (3) This course is intended for persons with an interest in the area of early childhood education and its current status at the local, national and international levels. Prereq: Admission to teacher education, Core 1500, TED 2250, 58 hours, required GPA.
4280/8286 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.
4290/8296 Learning Materials for Early Childhood Education (3) Designed to promote the development of sound criteria for use in selecting appropriate learning materials for children from three to eight years of age. (Fall, Spring)
4470/8475 Principles of Adult Education (3) An introduction to the study of adult education as a major development in contemporary America. The course surveys the major forms and problems of adult education and the foremost agencies providing programs. (Fall,Summer)
4480/8486 Adult Group Leadership (3) A study of adult groups in modern society and the characteristics of effective leadership in all types of groups. (Spring,Summer)
4590/8595 Microcomputers and the Library Media Program (3) This course is designed for library media specialists and directors to acquaint them with the applications of the microcomputer for library media centers. Computer terminology, software and hardware evaluation, instructional uses and practical library management uses will be included in the total study of microcomputers. Prereq: Graduate.
4680/6688 Literature for the Adolescent (3) This course is designed to assist library media specialists, English teachers, teachers of the humanities, and educational directors to gain information about the nature of adolescent literature and the concepts, values, and themes of adolescent literature. The course provides an introduction to the critical study of literature, including the writing process, the influence of culture on literature, and the role of the reader in interpreting texts. Prereq: Graduate.

4710/6716 Reference and Bibliography (3) This course will examine the functions of library resources. It is intended to acquaint students with the basic tools of reference work and with the techniques of organizing library resources. Prereq: Admission to Graduate College.

4720/6728 Advanced Reference and Subject Bibliography (3) This course is designed to provide an introduction to the basic tools of reference work, combined with evaluation of reference sources and services with various reference philosophies. The course will be divided into four parts: the use of reference tools and resources; the evaluation of reference services; the role of the reference librarian; and the development of research strategies. Prereq: Admission to Graduate College and TED 8710.

4740/6746 Cataloging and Classification I (3) An introduction to the basic cataloging procedures prescribed by the American Library Association and the Library of Congress. The course also involves working with the Dewey Decimal Classification System, Sear's List of Subject Headings, and MARC format used by OCLC. Prereq: Admission to the Graduate College.

4750/6756 Cataloging and Classification II (3) The course is designed to develop core cataloging skills including: pre-print materials; analytical cataloging; serial cataloging; and work with Library of Congress and MARC formats used on the OCLC system. Prereq: Graduate and TED 8746.

4760/6766 Selection and Evaluation of Educational Media (3) This course is designed for persons interested in gaining information about how learning materials are used in schools. The course will cover various aspects of educational media, including selection, evaluation, production, and utilization of educational media. Prereq: Admission to Graduate College.

4780/6786 Instructional Television Program Planning and Production (3) Students will be introduced to the role of television as applied to instruction. Production training and practical work, TV lessons and series planning, and viewing and evaluation of lessons will be included in addition to production of a major project of practical significance and application. Prereq: Graduate.

4790/6796 Photography as an Instructional Medium (3) Various photographic techniques will be studied to enhance the visual literacy skills of students preparing to teach in the fields of art and design. The course will focus on the translation of visual representations into patterns and relationships of non-verbal expressions. This course is designed for media specialists and elementary and secondary teachers interested in utilizing photography as an instructional tool.

4800/6806 Administration of the Instructional Materials Center (3) A course designed for students who wish to prepare themselves for the administration of an educational media program within an elementary and secondary school.

4810/6815 Principles and Philosophy of Vocational Education (3) A study of the basic philosophy underlying vocational education and the principles and practices in the various fields. (Fall, Summer)

4890/6899 Coordination Techniques in Vocational Education (3) Reviews responsibilities and techniques of coordination for the vocational teacher-coordinator and vocational counselor, with special emphasis upon local administration of the program and analysis of the laws and regulations governing this program. (Spring, Summer)

8000 Special Studies (1-3) A series of intensive courses especially for teachers in service who are interested in teaching special studies in the classroom. Prereq: Graduate and permission of department.

8610 Introduction to Research (3) To acquaint the beginning graduate student with the nature and significance of research; to enable the student to read, evaluate, synthesize, and evaluate results and techniques; to give some understanding of the meaning and spirit of research; to give some experience in studying and preparing research reports.

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 the influence of educational thought and practice from the Colonial era to the present U.S.

8030 Seminar in Education - Special Topics (3) The course provides an in-depth study of selected educational ideas. When scheduled, the specific focus of the course may be limited to elementary education, secondary education, urban education or other appropriate educational areas. Prereq: Graduate.

8040 Seminar in Supervision of Student Teachers (3) The seminar is designed for experienced teachers who are or may be serving as cooperating teachers, and who desire to study the aims, procedures, objectives, trends and development of student teaching. Prereq: Graduate.

8050 New Ways of Knowing and Education (3) This course will cover a variety of teaching/learning strategies that have emerged in the professional literature from various parts of the world. This will result in the student practicing the skills as the thrust of the class is experiential rather than theoretical. The students are expected to "do" not just "know about" these approaches. Prereq: Graduate.

8060 Current Issues and Trends in Education (3) Designed as an advanced study for the purpose of exploring current issues and trends within the K-12 curriculum. Prereq: Graduate.

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 develop the K-12 teacher with sufficient background and understanding of the role of economics in the classroom.

8140 Urban Cultures and Teaching: The City as Teacher (3) The course is designed to introduce students to educational technology through a study of the history and theory of the field. It is intended to provide students with a background in the characteristics, selection, evaluation, production and utilization of educational media. Prereq: Admission to Graduate College.

8150 Comparative Education (3) An intensive study of the educational direction of different countries and the impact of social, economic, political, and cultural factors on education. This course will cover the comparative analysis of educational systems, the role of international organizations in education, and the influence of global trends on education. Prereq: Graduate.

8160 Urban Cultures and Teaching: The City as Teacher (3) The course is designed to introduce students to educational technology through a study of the history and theory of the field. It is intended to provide students with a background in the characteristics, selection, evaluation, production and utilization of educational media. Prereq: Admission to Graduate College.

8170 Comparative Education (3) An intensive study of the educational direction of different countries and the impact of social, economic, political, and cultural factors on education. This course will cover the comparative analysis of educational systems, the role of international organizations in education, and the influence of global trends on education. Prereq: Graduate.

8180 Urban Cultures and Teaching: The City as Teacher (3) The course is designed to introduce students to educational technology through a study of the history and theory of the field. It is intended to provide students with a background in the characteristics, selection, evaluation, production and utilization of educational media. Prereq: Admission to Graduate College.

8190 Urban Cultures and Teaching: The City as Teacher (3) The course is designed to introduce students to educational technology through a study of the history and theory of the field. It is intended to provide students with a background in the characteristics, selection, evaluation, production and utilization of educational media. Prereq: Admission to Graduate College.

8200 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 the influence of educational thought and practice from the Colonial era to the present U.S.
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8180 The Urban School (3) An analysis of the societal and institutional processes and problems which have bearing upon the education of children in urban settings. Prereq: Admission to Graduate College of Education and permission of instructor.

8190 Conflict and Controversy In Urban Education (3) A course designed for students who wish to keep abreast of contemporary issues which confront the educational institution and the teaching profession in an urban milieu. Topics are modified annually to reflect current educational issues.

8200 Anthropology and Urban Education (3) This course is designed to examine ways in which education, conceptualized as cultural transmission, contributes to and is influenced by continuities and changes in culture. An understanding and working knowledge of the culture concept is basic to the course. Interrelationships among ecological, social, and ideological forms in a subculture or society will be stressed. A limited anthropological field study is a requirement for this course. Prereq: TED 8010. 

8210 Human Relations for Blach Free Education (3) This course is designed to develop practicing teachers' awareness of and skill in meeting students' needs in the areas of human understanding, acceptance and value. Students will examine existing attitudes toward various minority groups such as racial, ethnic, age, sex, etc. School materials and attitudes will also be examined in determining the effect they have on students.

8230 Current Kindergarten Practices (3) An in-depth examination of kindergarten practice, with a focus on criteria, procedures, and pedagogy for the implementation of developmentally appropriate curricula for kindergarten children. Prereq: Admission to Graduate College.

8300 Effective Teaching Practices (3) This course will focus on specific characteristics and behaviors of effective teachers. Course content will be derived from research on teaching and learning. Students will develop an instructional paradigm that contains a research base and design. Prereq: Admission to Graduate College. 

8330 Analysis of Teacher Behavior (3) Emphasis is placed upon current observational systems for analysis of teacher behavior in a classroom setting. Specific topics include in-depth instruction to interaction analysis, micro-teaching, non-verbal behavior and simulation. Student proficiency in these observational systems using video-tape equipment is stressed.

8340 Methods and Techniques for Identification and Teaching Listening Skills in the Classroom (3) The identification of listening problems and analysis of teaching methodology for improving listening skills in today's classroom. Practical methods of teaching listening as applied to specific learning problems in the areas of elementary and secondary education will be emphasized. A research paper presenting an in-depth analysis of the development of the classroom with suggested solutions will be completed by each participant. Prereq: Admission to Graduate College, College of Education and one year teaching experience; TED 8010.

8350 Models for Teaching (3) This course is designed to increase awareness and knowledge of teaching skills which can expand a teacher's repertoire. These additional skills and knowledge will allow a teacher to provide instruction to a broader range of student abilities. Prereq: None.

8360 Diagnostic and Corrective Instruction (3) This course involves the study of methods of diagnosing children's difficulties in the basic curriculum areas of the educational program of the elementary school and corrective techniques for overcoming such problems. The area of reading is included as it relates to other subject areas.

8370 Introduction to the Middle School (3) The course is intended for persons who have a need for acquiring knowledge and skills relevant to the operation of the Middle School, and who may ultimately need certification for professional assignments in the Middle School. Prereq: Admission to Graduate College.

8380 Introduction to Instructional Theory Into Practice (3) This course is designed for practicing teachers who are working to improve teaching skills in their classrooms. This course will focus on utilizing the research and practices in the Madelyn Hunter teaching model. Prereq: Admission to Graduate College.

8390 Teaching at the Middle Level (3) This course will provide teachers with a guided experience in implementing middle level teaching techniques and strategies in their classrooms. Students will be exposed to a variety of teaching strategies that have been identified as appropriate for this level in the research literature on middle level education. Students will then choose a teaching strategy to implement and evaluate in a middle level classroom. Prereq: TED 8010, 8970, six hours of approved elective courses and permission of instructor.

8400 European Study Tour (3) The purpose of this course is to examine British education in detail and European education in general for informative and comparative analysis. Academic lectures, seminars and workshops will be presented in the following areas of education: early childhood, special education, gifted and talented, administrative and health care. Participants will select the school visitations and seminars that are of special interest to them. Prereq: Admission to Graduate School and permission of instructor.

8410 Improvement of Instruction: Special Topics (3) This course provides an in-depth study of instructional theory, research and methodology designed to assist teachers in instructional improvement. When scheduled, the specific focus may be limited to selected subject areas. Prereq: Graduate.

8420 Trends and Teaching Strategies in Science Education (3) This course is designed for the graduate student whose study program emphasis is in the area of science education. Its focus will be K-12 and as such is meant to serve graduate students in both elementary and secondary education departments. The course will describe and analyze past and present trends in science education including curricula, teaching-learning strategies, the laboratory and instructional materials. Particular strategies that have merit and relevance concerning today's students and teachers will be treated in-depth.

8430 School Curriculum Planning (3) Designed to provide the student with understanding of the nature and trends in school curriculum development with the principles and practices utilized in curriculum planning. Strong emphasis is placed on curriculum construction.

8440 International Curriculum Practices (3) An analysis of curriculum practices and procedures that are currently utilized in selected countries around the world. Units of study will include Belgium, France, Germany, England, China, Africa and Russia. The course activities will include correspondence with foreign students and educators as well as in-depth research on assigned areas. Prereq: Graduate.

8450 Seminar in Global Education (3) This course is designed to assist elementary and secondary students in understanding the nature and kinds of global education. Major emphasis will be placed on practical program implementation of global education concepts into the existing curricular offerings. Prereq: Admission to Graduate School.

8460 Simulation/Gaming Laboratory for Teachers (3) This course is designed to familiarize teachers with simulation/games. It is designed to prepare them with the ability to use and create simulation/games for the classroom. Prereq: Graduate.

8490 Teaching Adults To Read: A Course in Literacy Training (3) This course is designed for elementary, secondary, ABE teachers and other individuals interested in working with adult illiterate populations. The major emphasis in this course will be understanding the adult learner, developing methods and procedures appropriate for teaching adults to read and identify and develop appropriate testing instruments. Prereq: TED 8010 and one course in reading at either the graduate or undergraduate level.

8500 Workshop: Newspaper in the Classroom (3) A course designed to assist teachers in planning to use the newspaper as an aid to classroom instruction. The course content includes the importance of the newspaper, methods for using the newspaper, activities suitable for classroom use and a study of available curricular materials.

8510 Aerospace Education Workshop (3) The 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. It is designed primarily to serve the graduate student in the college of education; however, students with other professional goals will be considered. Its emphasis will be K-12 and as such is meant to serve both the present elementary and secondary education graduate students. Prereq: Graduate.

8520 Automated Information Systems (3) To examine the historic, current and future trends of automated information systems; to ascertain the flow of information through a retrieval system; to introduce vocabulary, methodology, theory and techniques utilized in operating automated systems; criteria for evaluation and selection of automated retrieval systems and services. Prereq: Graduate.
8500 Using Microcomputers in the Educational Process (3) This course is designed to enable teachers, administrators, and other school personnel to understand what microcomputers are and how they can be applied to the educational process. Elements of computer terminology, programming and applications will be considered along with philosophical aspects of man/machine relationships. The course is not intended for persons who have a background in computing or programming. Prereq: Graduate.

8530 Enhancing Instruction with Microcomputers (3) This course examines the ways in which microcomputers can be used to improve curricular offerings and enhance instructional activities in elementary and secondary schools. Course enrollees will review their own instructional goals and practices and compare these with the capabilities/limitations of microcomputers. Current and projected software and hardware developments will be evaluated in relation to anticipated educational needs. Prereq: Graduate.

8550 Developing Microcomputer Instructional Courseware (3) This course is designed for teachers and other educational personnel who wish to design instructional software for a microcomputer. The concepts of task analysis, motivation, computer graphics, student-computer interaction, evaluation and writing support materials are considered. Various authoring systems will also be examined. Prereq: TED 8540 or equivalent or familiarity with the BASIC language.

8570 Computers in the Curriculum (3) The course examines the impact that microcomputers and other microcomputer-related technologies have had and will have on the elementary and secondary school curriculum. The role of microcomputer technology in achieving traditional curriculum outcomes is evaluated and anticipated changes in the curriculum resulting from microcomputer applications in instruction will be considered. Prereq: Graduate.

8580 LOGO and the K-12 Curriculum (3) This course is intended for elementary and secondary teachers. It provides an introduction to the LOGO language for microcomputers and its applications to the K-12 curriculum. The history, philosophy and text/graphic operations of LOGO are considered with particular emphasis on the implementation of LOGO into the various areas of the elementary and secondary school curriculum. Prereq: Graduate.

8590 Using Microcomputer Productivity Tools in the K-12 Curriculum (3) This course introduces students to the use of microcomputer productivity tools - word processors, data base managers, spreadsheets, telecommunications and graphic programs - to achieve a wide range of learning outcomes. Particular emphasis is placed on developing instructional materials for use in the K-12 curriculum which employ these productivity tools to develop higher order thinking skills. Prereq: Graduate. TED 8540 or equivalent.

8600 Literature for Children and Youth (3) The course is designed as a graduate-level course dealing with the utilization of literary materials for children from preschool through grade six reading level. It is to provide the student an opportunity to explore, evaluate and understand literature for children; to acquaint students with research in the field; and to provide an avenue for developing more meaningful and creative learning activities for children. Prereq: Graduate.

8820 Introduction to Vocational Special Needs Students (3) Designed for secondary education personnel who desire knowledge of the history and current status of Vocational Special Needs. Students will gain a better understanding of handicapped and disadvantaged students. Prereq: Admission to Graduate College.

8850 Curriculum Construction for Adult and/or Special Needs Students (3) Designed for teachers, supervisors, coordinators and administrators who are working with adult learners and/or special needs learners. The course includes principles, needs, factors and trends that should be considered in developing curriculum to meet the needs of special populations. Prereq: TED 8820.

8840 Career Exploration & Occupational Readiness for the Special Needs Learner (3) The course involves the processes of diagnosing students’ needs in vocational education, communicating occupational information, and assisting students in the preplacement and job entry-level employment. This course is intended for teachers, counselors and educational support personnel. Prereq: TED 8820.

8880 Administration & Supervision of Adult/Vocational Education (3) Basic concepts for administration and supervision of vocational education, as related to the needs of the superintendent, principal, supervisor. Prereq: Graduate. (Same as EDAD 8880)

8900 Introduction to the Education of the Gifted (3) The course involves the processes of defining and identifying characteristics of giftedness, analyzing associated problems, examining relevant research, and relating these to the overall education of gifted individuals. Prereq: Admission to Graduate College; one year teaching experience.

8910 Guiding Gifted Students (3) A course designed to increase teacher awareness of the social and emotional needs of gifted students. Teachers will also develop skills that will assist gifted students in meeting these developmental challenges. Prereq: Admission to graduate study. (Same as EDUW 9110)

8920 Teaching the Gifted and Talented (3) This course will focus upon the processes for developing a total sequential K-12 program for the gifted and talented, as well as the practical program implications for the individual classroom. Prereq: Admission to Graduate College and TED 8900, or permission.

8930 Individualization of Instruction (3) The course involves the study of the philosophy of individualization and the provisions needed in the areas of curriculum, learning factors/styles, student and teacher roles and physical arrangements. Prereq: Admission to Graduate College.

8940 Individual Factors/Styles that Affect Teaching and Learning (3) The course involves the study of the factors/styles that affect teaching and learning including the rationale, the various models and criteria for evaluating their use with students and specific applications to the teaching of content within the classroom.

8950 Creativity (3) This course focuses upon defining and identifying the characteristics of the creatively gifted student, as well as studying educational models, program planning and teaching strategies. Prereq: Admission to Graduate College.

8970 Independent Study (1-3) Supervised independent study in special topics under the supervision of a faculty member. Prereq: Permission, Admission to Graduate College.

8980 Practicum in Teaching the Gifted K-12 (3) This supervised practicum in gifted education is designed to give field experience to the teacher whereby she/he may learn principles and educational procedures for teaching gifted students. Prereq: Admission to Graduate College and permission of instructor.

8990 Thesis (1-6) Independent research project required of all students taking Master of Arts degree. See Major adviser.

9110 Principles and Practices in Elementary Reading (3) This is a graduate-level course for both elementary and secondary teachers and is open to any student who has graduate standing. Major emphasis will be placed on the administration, organization, evaluation, and methods and materials for the teaching of reading in each of the content subjects at the junior and senior high levels.

9170 Seminar in Organization and Administration of Reading Programs (3) Participation in the seminar is limited to individuals who have completed at least one graduate reading course (or equivalent) and who are professional members who are charged with the total or partial responsibility for organizing and administering reading programs. Familiarity with the philosophy, organization and major research-related to different reading programs will be emphasized. Local and area reading authorities will be given the responsibility of selecting topics to be discussed by the students. Prereq: One graduate reading course or permission of instructor.

9180 Seminar in Research in Reading (3) A course for graduate and postgraduate students relating to in-depth studies of significant, recent research in reading with appropriate application for instructional procedures which may be undertaken. Each student will conduct self-initiated research and report the results of the activity to other class members for comment and evaluation. Prereq: One graduate reading course (or equivalent). TED 8910 (or equivalent), and permission.

9350 Seminar in Applications of Non-Verbal Communication Theory (3) Theories and research on the development, facilitation and barriers of human non-verbal communication. Analysis of non-verbal interaction with specific applications to education, business, supervision, counseling, therapy and interpersonal speech communication. Prereq: Course in research methods or permission of instructor.
URBAN STUDIES

Master of Science

This is a professional graduate degree which is designed: (1) to prepare students for human service careers in an urban setting; (2) for research or teaching in this field; (3) for those already involved in urban programs and are seeking additional professional training.

Qualified urbanists are being sought by a wide range of employers. Private corporations as well as public agencies are seeking employees who have a broad range of technical skills and an understanding of the problems of contemporary urban society.

Admission

The general prerequisite for admission to the Urban Studies Program is a Bachelor of Arts or Bachelor of Science degree or equivalent.

To be admitted unconditionally, the student must have achieved a grade average of 3.0 on a 4.0 system for either the full undergraduate program, for the undergraduate major of Urban Studies, or for the junior-senior years.

Provisional admission may be granted where the applicant has achieved a grade point average of 2.7 or above. Exceptions to the 2.7 grade point average may be made by the Graduate Program Committee in conjunction with the Graduate Dean where the applicant:

1. has a demonstrated record of work experience directly related to Urban Studies; and
2. has demonstrated through recent coursework an ability to successfully complete graduate work.

Students who wish to take courses for professional growth or personal interest but who do not intend to pursue an advanced degree may be granted unclassified admission.

Application for Candidacy

In accordance with Graduate College guidelines, students must apply for candidacy for the degree when: (1) a minimum of six hours of graduate credit necessary to the degree program has been completed; (2) a grade average of “B” with no grade lower than “C” or “C+” has been earned; (3) the student is not currently carrying "incompletes" within their area of study.

As a rule, no degree can be awarded in the same semester that candidacy for the degree is approved.

Application forms should be filled out by the student in consultation with a faculty adviser as soon as the student can qualify for admission to candidacy. A detailed resume must be included with the application.

Transfer of Credit

Students may transfer up to one-third of the coursework required for the Urban Studies degree requirements. This requires approval of the Graduate Program Committee. Students should discuss this with a faculty adviser. The request for a transfer of credit should be made as soon as possible but in no case later than when filing for candidacy. The request to transfer credits requires a letter of explanation from the student.

Degree Requirements

Thirty-six semester hours of coursework are required. A core of six required courses will be completed, and nine credit hours must be taken from one of three areas of concentration. The required courses include UBNS 8010, 8020, 8826, 8830, 8840 and a graduate course on research.

Courses applicable to the area of concentration may include, but are not necessarily restricted to: Community and Regional Planning 8116, 8136, 8156, 8924; PA 8050, 8436, 8810; SOC 8106, 8146, 8756; GERO 8106, 8356, 8486; COUN 8000, 8296, 8796; GEOG 8126, 8800, 8810. A maximum of nine hours of optional credit may be selected from ECON 8316, 8326, 8336, 8850; HIST 8436, 8446, 8476; GEOG 8016, 8136, 8216; or any of the courses listed above, subject to approval. Eighteen hours of the coursework must be at the 8000 level. (A Master's thesis is not required.)

A comprehensive final examination is required, but a thesis is not required.

Course Descriptions

4060/8066 Introduction to Urban Planning (3) This course will serve as an introduction to the development of urban planning as it has shaped and reacted to major trends in U.S. history. It will provide students with major themes and traditions in the field of planning and will include planning practice, planning procedures and methods and contemporary issues in the field.

4820/8826 Comparative Urban Studies (3) Emphasis will be upon contrasting the cities of the developed and developing areas of the world.

8010 The Metropolis as a Public Economy (3) The integration of politics and economics in the metropolitan system as they affect metropolitan problems such as poverty, transportation, housing, crime, education and the environment will be analyzed.

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.

8830-8840 Interdisciplinary Seminar On The Urban Community (3-6) An interdisciplinary course on the metropolitan community in which urban problems are put in a broad interrelated focus. (Same as GEOG 8930-8940, PSCI 8630-8640, SOC 8830-8840)
NON-DEGREE AREAS

ART
Graduate art courses are offered to fulfill requirements for a minor field or as cognate or selected courses on a plan of study.

AGRICULTURAL ECONOMICS
A graduate course in agricultural economics is offered on the campus of the University of Nebraska at Omaha by the University of Nebraska-Lincoln's Department of Agricultural Economics.

BLACK STUDIES
Graduate Black Studies courses may be used on a plan of study.

CHEMISTRY
Graduate chemistry courses are offered to fulfill requirements for a minor field or as cognate or selected courses on a plan of study.

ENGINEERING MECHANICS
Graduate courses are offered to fulfill requirements for a minor field or as cognate or selected courses on a plan of study.

INDUSTRIAL SYSTEM TECHNOLOGY
Graduate courses are offered to fulfill requirements for a minor field or as cognate or selected courses on a plan of study.

FOREIGN LANGUAGES
Graduate foreign language courses are offered to fulfill requirements for a minor field or as cognate or selected courses on a plan of study.

HOME ECONOMICS
Home Economics graduate offerings at UNO may be used as a minor (HDVF, HNFM, or TXCD) for those pursuing programs in another discipline. The minor portion should be determined in consultation with a designated member of the Graduate Faculty from Home Economics. UNO courses may also be used to satisfy recertification.

Admission to the graduate programs in the College of Home Economics requires presentation of the baccalaureate degree from an accredited institution and GRE scores; three letters of recommendation and a goal statement; and TOEFL for international students for whom English is a second language. Departments within the college may determine specific course deficiencies.

Application for a graduate degree programs in Home Economics is to be made to Graduate Studies, Lincoln Campus. In addition to this, an important step to initiate a graduate program is to consult with the chairperson of the graduate program in Lincoln. Staff in the Omaha program will assist in making such appointments. For graduate degrees in Home Economics, it will be necessary to take home economics courses on the Lincoln campus.

Interdepartmental Home Economics program offers graduate work leading to the Master of Science or Master of Arts degree.

Students applying for study in the Interdepartmental Home Economics master's degree must hold a bachelor's degree in Home Economics or its equivalent. The undergraduate work must have included the equivalent of 24 hours in Home Economics, distributed in at least three subject matter areas and 20 hours in natural and social sciences including a minimum of nine hours in the natural and six hours in the social sciences.

Work leading to the master's degree in Home Economics may be completed under Option I or II (see Graduate Studies Bulletin-Lincoln). If Option I is selected the thesis research may be done in any one of the four cooperating departments. Under any option, not more than one-half of the total program for the master's degree, including thesis research when applicable, may be completed in the major subject matter areas. Those subject matter areas are: Consumer Science and Education; Nutritional Science and Hospitality Management; Human Development and the Family; and Textiles, Clothing and Design.

At least six hours of the remaining work must be completed in one or more of the departments other than the major one. Additional supporting courses to complete the program may be carried in cooperating departments or in the departments outside of the College of Home Economics. However, if Option II is selected the required minor must be completed in HDF, NSHM, TXCD or a department other than those in the College of Home Economics, which can be an approved graduate program at UNO. Separate programs leading to the Master's degree also are offered by the Department of Nutritional Science and Hospitality Management, Department of Human Development and the Family; and the Department of Textiles, Clothing and Design.

Nutritional Science and Hospitality Management. Candidates for the Master of Science degree in Nutritional Science and Hospitality Management must hold a Bachelor of Science degree or a Bachelor of Arts degree from an accredited college; have completed undergraduate preparation the equivalent of that required in the Basic General Education Core in Home Economics; plus have at least 10 hours exclusive of freshman courses in biochemistry, in microbiology, and in physiology for a total of at least 18 hours in Nutritional Science and Hospitality Management, chemistry and biological science.

Human Development and the Family. Candidates for the Master of Science degree in Human Development and the Family must hold a Bachelor of Science or a Bachelor of Arts degree from an accredited college; have completed undergraduate preparation the equivalent of that required in the Basic General Education Core in Home Economics; plus a major of at least 18 hours exclusive of freshman courses in Human Development and the Family or the equivalent from psychology, educational psychology or sociology. A minimum of 3.0 undergraduate GPA is required.
Textiles, Clothing and Design. Students may qualify for study in this area by presenting a baccalaureate degree from an accredited institution and by completing a minimum of 12 hours of undergraduate coursework beyond the freshman level in textiles, clothing design and equivalent from a related area such as art or architecture. The Graduate Record Examination (general) is required. The graduate Area Committee will consider the qualifications for admission of applicants for study in textiles, clothing design and leading to a Master of Science or Master of Arts degree and will make recommendations to the Graduate College. Deficiencies as assessed on an individual basis may be removed concurrently with graduate studies.

Consumer Science and Education. Consumer science and education is included in the Interdepartmental Home Economics program.

PHILOSOPHY AND RELIGION
Graduate courses in philosophy and religion are offered to fulfill requirements for a minor field or as cognate or selected courses on a plan of study.

PHYSICS
Graduate physics courses are offered to fulfill requirements for a minor field or as cognate or selected courses on a plan of study.

Course Descriptions

AGRICULTURAL ECONOMICS
4820 Agricultural Policy (3) An examination of policies and issues affecting the U.S. agricultural sector. Emphasis is placed on policy formulation and evaluation, future policy alternatives, and the interface of agricultural policy with other sectors of the U.S. and world economy. Prereq: Twelve hours of economics.

ART
4830/8836 Italian Renaissance Art History (3) A study of painting, sculpture and architecture in Italy during the 14th, 15th and 16th centuries. Prereq: Graduate standing and permission of instructor.
4850/8856 Baroque and Rococo Art History (3) A study of painting, sculpture and architecture in Europe during the 17th and 18th centuries. Prereq: Graduate and permission of instructor.
4860/8896 Modern Art History to 1945 (3) A study of the art of the Western world from the end of the 18th century to the Second World War, including major developments in painting, sculpture and architecture. Major emphasis will be placed on developments in painting in Europe. Prereq: Graduate and permission of instructor.
4880/8886 Nineteenth Century European Art History (3) A study of the art of Europe from the French Revolution to the age of Impressionism, including developments in painting, sculpture and architecture. Major emphasis will be placed on achievements and paintings in France, England and Germany. Prereq: Graduate and permission of instructor.
8910 Graduate Sculpture (3) Advanced problems in sculptural media. Prereq: 8316.
8910 Graduate Painting (3) More complex problems in the oil medium and related material. Prereq: ART 8416.
8510 Special Processes in Printmaking (3) Advanced problems in printmaking stressing special processes in lithography, intaglio and photolithography. Strong emphasis on image and content development. Prereq: ART 4510 and permission.
8910 Independent Study in Art History (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. Prereq: Permission of instructor.
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. Prereq: To be determined by the instructor, based upon the preparation required for an adequate understanding of the material of the course.

BLACK STUDIES
9986 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 wish, as long as a specific subject is not duplicated. Prereq: Graduate, bachelor’s degree or permission of instructor.

CHEMISTRY
All courses cited as prerequisites for enrollment in Chemistry must be completed with a grade of "C" or better.
3355/3355 Physical Chemistry (3) A presentation of selected topics from the areas of classical thermodynamics and electrochemistry. Prereq: CHEM 2200, 2264, 2274, 2400, 2404, PHYS 2120, MATH 1950.
3354/3359 Physical Chemistry Laboratory (1) Physical chemistry laboratory to be taken concurrently with CHEM 3350. Prereq: CHEM 2200, 2264, 2274, 2400, 2404, PHYS 2120, MATH 1950.
3414/8419 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. Prereq: Graduate and CHEM 2400, 2404 or equivalent.
3424/8429 Spectroscopic Characterization (1) Laboratory course involving the use of spectrometric instrumentation for the identification of compounds containing organic functional groups. Prereq: CHEM 2200, 2274, 2400 and 2404.
3514/8515 Inorganic Preparations (1) Laboratory preparation and characterization of representative types of inorganic compounds by various standard and special techniques. Prereq: CHEM 2274, 2400, 2404, 2500.
3368/8366 Physical Chemistry (3) A presentation of selected topics from the areas of quantum mechanics, spectroscopy, kinetics and statistical mechanics. Prereq: CHEM 3350, 3354.
3364/8369 Physical Chemistry Laboratory (1) Physical chemistry laboratory to be taken concurrently with CHEM 3360. Prereq: CHEM 3350, 3354.
3700/8705 Radiochemistry (2) Lecture two hours and discussion one hour. A survey of the basic principles of radiochemistry and their application in the fields of biology, chemistry and medicine. CHEM 3704 to be taken concurrently. Prereq: CHEM 3360/8365 which may be taken concurrently or graduate.

3704/8709 Radiochemistry Laboratory (1) Introductory radiochemistry laboratory to be taken concurrently with CHEM 3700. Prereq: CHEM 3360/8365 which may be taken concurrently or graduate.

4230/8236 Advanced Organic Chemistry (3) An advanced lecture course in modern theories and special topics in organic chemistry. Prereq: CHEM 2250 and 3360/8365 which may be taken concurrently or graduate.

4240/8246 Advanced Organic Chemistry (3) An advanced lecture course in organic chemical reactions. Prereq: CHEM 2260 and 3360/8365 which may be taken concurrently or graduate.

4400/8406 Instrumental Analysis (3) Study of instrumentation for use in quantitative and trace analysis. Advanced instrumental methods and electronics for instrumentation are included. Prereq: CHEM 3360, 3564, 3410.

4404/8409 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. Prereq: CHEM 3360, 3564, 3410.

4520/8520 Experimental Stress Analysis I (3) Investigation of vibrations of mechanical and structural systems with various basic theories and techniques associated with the analysis of vibrations in mechanical systems. Prereq: CHEM 2250 and 3360/8365 which may be taken concurrently or graduate.


Civil Engineering

4210/8216 Hazardous Waste Management (2) A survey of the components of the hazardous waste management system in the U.S. Included is an overview of federal and state regulations, classification, chemical characteristics, disposal and treatment technologies, superfund site analysis and clean-up technologies, transportation systems, risk assessment and risk management. Prereq: Junior.

4240/8246 Solid and Hazardous Waste Engineering (3) Planning design and operation of solid and hazardous waste collection processing treatment and disposal systems including resources and energy recovery systems. Prereq: CE 3260, 3340.

Industrial Systems Technology

4210/8216 Contemporary Trends in Industrial Education for the World of Construction (3) Introduction to a new program development in industrial education, with major emphasis placed on the world of construction curriculum. Analyzes basic construction industry and management practices utilized in industry and adapts these as learning units for the junior high industrial laboratory. Prereq: For 4210, junior. For 8216, graduate.

4220/8226 Contemporary Trends in Industrial Education for The World of Manufacturing (3) Introduction to a new program development in industrial education, with major emphasis placed on the world of construction curriculum. Analyzes basic manufacturing operations and management practices utilized in industry and adapts these as learning units for the junior high industrial laboratory. Prereq: For 4220, junior.

Mechanical Engineering

4130/8136 Thermal Systems Design (3) Application of thermodynamic principles to the design of: (A) air conditioning systems, (B) power plants, (C) heat exchangers, or (D) internal combustion engines/turbines. Prereq: ME 3136 or equivalent.

4680/8686 Failure Analysis: Prevention and Control (3) Metallurgical tools for analysis of failures; types and modes of failures; sources of design and manufacturing defects. Case histories are utilized to illustrate modes of failures and principles and practices for analysis. Design concepts as well as remedial design is emphasized with these case studies. Several projects involving case analysis and design by students are included. Prereq: ME 3250; METE 3600 or ME 3530 or equivalent.

4730/8736 Corrosion (3) Fundamentals of corrosion engineering, underlying principles, corrosion control, materials selection and environmental control. Prereq: CHEM 109 or equivalent.

4750/8756 Applied Physical Metallurgy and Design (3) Principles of alloying; alloy selection; modification of the physical properties of structural alloys by thermal, mechanical and chemical treatment; solidification and joining phenomena. Prereq: METE 260 or equivalent.

4980/8986 Laboratory and Analytical Investigations (1-6) Investigation and written report of research into specific problems in any major area of mechanical engineering. Prereq: Permission.

FOREIGN LANGUAGES

French

4016/8016 Advanced Conversation and Composition (3) Further practice in oral fluency and writing skills along with grammar review and stylistics. Prereq: FREN 3030 and 3040 or 5 years of high school French. 4150/8156 Contemporary French and German Novel (3) Comparative study of selected contemporary French and German novels. Conducted in English with English translations. Additional readings in French for French students. Prereq: Permission of instructor. (Same as GERM 4150/8156 and ENGL 4150/8156)
410/8106 Advanced Conversation and Composition (3) Practice in conversation and written composition, grammar review, study of phonetics and basic reference works. Prereq: GER 2150 or permission.

410/8106 Introduction to Germanic Folklore (3) An intensive familiarization of the student with the broad spectrum of folklore in modern and ancient societies of the Indo-Germanic continuum. Definition of folklore as an academic field and the delineation of the material studied by the student of folklore. Introduction to the folklorist's methodology in collecting, archiving and research. To be taught in English. Prereq: For 4100, at least three credit hours in any one of the following areas: Anthropology, art, music, literature, psychology, sociology or history. For 8106, graduate and permission.

411/8116 Contemporary French and German Novel (3) Comparative study of selected contemporary French and German novels. Conducted in English with English translations. Additional readings in German for German students. Prereq: Permission of instructor. (Same as FREN 4110/8116 and ENGL 4110/8116)

417/8176 Comparative French and German Drama (3) Comparative study of selected contemporary French and German plays. Conducted in English with English translations. Additional readings in French for French students. Prereq: Permission of instructor. (Same as GERM 4170/8176 and ENGL 4170/8176)

4580/8586 Introduction to Linguistics (3) An introduction to the concepts and methodology of the scientific study of language; includes language description, history, theory, variation and acquisition as well as semantics, lexicography and foreign language teaching. Prereq: For 4580, junior or permission. For 8586, graduate.

480/8806 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. Conducted in English with readings in French or English. Prereq: Permission of instructor. (Same as GERM 4800/8806)

490/8906 Independent Study (1-3) Guided independent study and research under tutorial supervision. May be repeated with different topic but not in same semester for maximum of six semester hours total. Prereq: Permission of instructor.

4960/8966 Proseminar (1-3) A detailed study of narrower phases of literature, language or culture. Prereq: Permission of instructor.

Spanish

410/8106 Advanced Conversation and Composition (3) For graduate students who need a refresher course in conversation, grammar and composition. Prereq: Graduate.

410/8106 Theater of the Golden Age (3) Foremost Spanish dramatists and plays of the 16th and 17th centuries, with emphasis on Lope de Vega, Tirso de Molina and Calderon de la Barca. Prereq: For 4100, SPAN 3170 or permission of instructor.

411/8116 Novel of the Golden Age (3) Study of the prose masterpieces of the 16th and 17th centuries, including such works as Lazarillo de Tormes, La Celestina and Don Quixote. Prereq: For 4110, SPAN 3170 or permission of instructor.

416/8169 Latin American Literature of the 20th Century (3) Critical and analytical study of the foremost Spanish-American dramatists, poets and essayists from modernism to the present. Prereq: SPAN 3220 or permission of instructor.

4200/8206 Latin American Novel (3) Study of representative novels and novelists of the 19th and 20th centuries, with emphasis on contemporary authors. Prereq: SPAN 3220 or permission of instructor.

4520/8520 Generation of 1898 (3) Examination of the ideology, philosophy and literary techniques of Unamuno, Martinez Ruiz, Valle-Inclan, Baroja and Antonio Machado. Prereq: SPAN 3160 or permission of instructor.

4350/8355 Latin American Short Story (3) Representative stories of the 19th and 20th centuries, from Realism to modern production. Prereq: SPAN 3210 and 3220 or permission of instructor.

4550/8556 Modern Drama of Spain (3) Ideologies, techniques and influences of the major Spanish dramatists of the 19th and 20th centuries. Prereq: SPAN 3160 or permission of instructor.

4560/8566 Modern Novel of Spain (3) Analytical study of the representative Spanish novelists of the 19th and 20th centuries from P. A. de Alarcon to Cela. Prereq: SPAN 3160 or permission of instructor.

490/8906 Independent Study (1-3) Guided independent study and research under tutorial supervision. May be repeated with different topic but not in same semester for maximum of six semester hours total. Prereq: Permission of instructor.

4960/8966 Proseminar (1-3) A detailed study of narrower phases of literature, language or culture. Prereq: Permission of instructor.

HOME ECONOMICS

"Courses offered only at the University of Nebraska-Lincoln.

Consumer Science and Education

8370 Special Topics (1-6) Prereq: Twelve hours home economics or permission of departmental chairperson.

Human Development and the Family

4700/6706 The Older Child (3) Lecture, lab arranged. Study of the scientific literature concerning the principles of physical, emotional, social, moral and cognitive development of the elementary school-age child as they relate to a wholesome and well-integrated personality: implications for guidance. Prereq: Twelve hours of HDFS or social sciences.
4720/8726 The Adolescent In the Family (3) Study of the scientific literature concerning the interrelationships of the physiological, psychological and sociological aspects of the adolescent and young adulthood years. Emphasis on understanding the individual and his/her continuous adjustment within the family life cycle as he/she makes the transition from childhood to adulthood. Prereq: Twelve hours of HDVF or social sciences.

4960/8966 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. Prereq: Twelve hours in major department or closely related areas and permission.

4970/8976 Practicum In HDVF (1-3) Appropriate fieldwork experiences in area(s) of specialization within the department, for example: early childhood, parent education, physical or mental handicaps, gerontology, marriage and family counseling. Prereq: Twelve hours of HDVF or permission of instructor, as required for individual options.

4990 Research Experiences (1-5) Participation in an ongoing research project. Select from foods, human nutrition, education, animal or survey research areas. Prereq: Permission of instructor.

4966 Ecology of Malnutrition (3) Fundamental principles underlying the current world malnutrition problems. Investigation of projected future problems and schemes for their prevention or solution. Prereq: NSHM 8500 and 8530, or permission of instructor.

PHILOSOPHY AND RELIGION

Philosophy
3050/8055 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. Prereq: Graduate or permission of instructor. (Same as PHYS 3050/8055)

4650/8656 Philosophy of Mind (3) A discussion of various accounts of the nature of minds which focuses upon philosophical questions 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. Prereq: Twelve hours of HDVF, psychology, educational psychology or sociology.

Nutritional Science and Hospitality Management
4400/8406 Advanced Foods (3) Chemistry of food; an examination of the objective and subjective methods of evaluation of food quality and characteristics. Lect 2, Lab 2. Prereq: NSHM 2410, 12-14 hours of biological sciences or permission of instructor. Fee of $25 to cover cost of materials.

4450/8556 Cultural Aspects of Diet (3) Cultural approach to the dietary patterns of various population groups. Factors involved in food habit alteration. Offered alternate years only. Prereq: NSHM 2410, nine hours of social science or permission of instructor.

4490/8596 Hospitality Facility Planning and Design (2) Planning and design essentials for the hospitality industry which results in efficient resource utilization and the production of quality food and service select and specification of food service equipment and furnishings. Field trips to local hotel and foodservice establishments. Prereq: NSHM 3700 or permission.

4710/8716 Purchasing for the Hospitality Industry (2) Purchasing and specification of food, beverages and non-food supplies for use in the hospitality facility. Assessment and evaluation of purchases in relationship to production needs and cost control. Field trips to local food distributors and foodservice establishments. Prereq: NSHM 3700 or permission. (Same as NSHM 471B/871B)

4714/8719 Purchasing for the Hospitality Industry Laboratory (2) Purchasing and specification of food and beverages, and food supplies for use in the hospitality facility. Assessment and evaluation of purchases in relationship to production needs and cost control. Field trips to local food distributors and foodservice establishments. Prereq: NSHM 3700 or permission. (Same as NSHM 471B/871B)


4760/8766 Hospitality Management Study Tour (1-6) A learning experience for broadening the scope of experience and developing a more thorough understanding of the hospitality industry and its problems. The experience includes visits to the hospitality facilities, national food and equipment show, food processors, equipment manufacturers and trade exchanges. Number of credits determined by tour length, assignment and sites visited. Prereq: NSHM 24/20, 3700, 8716. Lab fee required.

4976/8976 Practicum In Hospitality Management (3-6) Professional experience under supervision in the hospitality industry as planned for individual student's interests, needs and background. Prereq: Permission of instructor.

9535 Ecology of Malnutrition (3) Fundamental principles underlying the current world malnutrition problems. Investigation of projected future problems and schemes for their prevention or solution. Prereq: NSHM 8500 and 8530, or permission of instructor.

Religion
4150/8156 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., Hasidism, Reform, Historical/Conservative Judaism, Modern Orthodoxy, Zionism) and major historical events (e.g., the American and French Revolutions, Tzarist oppression, the Holocaust and the establishment of the State of Israel) will be analyzed for their ongoing impact. Prereq: Nine hours in religion or permission of instructor.

4300/8306 Existentialism and Religions 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.

8900 Readings in Religion (3) 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 once for credit. Prereq: Graduate, permission of instructor, and no "incompletes" outstanding.

PHYSICS

3010/8015 Elements of Electronics (3) The background of theory, operation and practice of electronic devices and circuits particularly as they apply to scientific instrumentation. Both solid state and vacuum tube principles and circuits are involved. Prereq: MATH 1550, 1860, 1970 and PHYS 1120 or 2120.

3020/8025 Optics (3) The behavior of electromagnetic radiation as disclosed by studies of geometrical, wave and quantum optics. Topics include refraction and reflection, matrix methods in paraxial optics, lasers and holography, the human eye, interference, coherence, polarization, Fraunhofer and Fresnel diffraction. Prereq: PHYS 1120 or 2120 and MATH 1970.
3050/8055 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. Prereq: For PHYS 3050; junior or permission of instructor. For PHYS 8055: graduate or permission of instructor. (Same as PHIL 3050/8055).

3150/8155 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. Prereq: PHYS 1120 or 2120.

3160/8165 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. Prereq: Permission of Instructor.

3450/8455 Classical Mechanics (3) Statics and dynamics of particles and rigid bodies including the equations of Lagrange and Hamilton. Prereq: MATH 1950, PHYS 3250 or permission.


3850/8855 Thermodynamics and Statistical Physics (3) Topics include: equations of state, the four laws of thermodynamics, phase changes, thermodynamic potentials, kinetic theory and transport processes, classical and quantum statistics of an ideal gas (e.g., blackbody radiation). Possible applications to be included: Einstein theory of a solid, paramagnetism, conduction of electrons and collapsed, degenerate stars. Prereq: PHYS 2120 (or 2160) and MATH 1970.

4200/8200 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. Prereq: PHYS 3250 or permission.

4210/8216 Quantum Theory (3) The matrix 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. Prereq: PHYS 4200 or permission.

4220/8226 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. Prereq: PHYS 4220 or permission of instructor.

4230/8236 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. Artificial nuclear reactions and elementary particles will be covered. Prereq: PHYS 4200/8206 or permission of instructor.

4350/8355 Astrophysics (3) This course introduces the fundamental 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. Prereq: PHYS 2130 or 4120 and MATH 1970. Recommended: PHYS 1350.

4950-4960/8956-8966 Problems in Physics (Each 1-3) Individual laboratory and/or library work in some field of energy. Prereq: General physics and permission of instructor. For 4960: 4950 and permission of instructor.
Pictured above is Margaret Gessaman, Dean of Graduate Studies and Research, with the Graduate Council. The Council, made up of faculty and graduate students, meets regularly to consider matters of importance to graduate programs and students.
GRADUATE FACULTY

FAUAD A. ABDULLAH Finance, Banking and Insurance, Ph.D., University of Pennsylvania, 1957; Professor

JAMES C. AKERS Special Education and Communication Disorders, Ed.D., Oklahoma State University, 1969; Associate Professor

HESHAM ALL Mathematics and Computer Science, Ph.D., University of Nebraska-Lincoln, 1988; Assistant Professor

DAVID M. AMBROSE (GF) Marketing, D.B.A., George Washington University, 1971; Professor

SUNNY ANDREWS Social Work, Dr.P.H., Johns Hopkins University, 1973; Professor

ANN E. ANTFLINGER (GF) Biology, Ph.D., University of Georgia, 1979; Associate Professor

AARON ARMFIELD Special Education and Communication Disorders, Ed.D., University of Northern Colorado, 1964; Professor

WALTER M. BACON JR. Political Science, Ph.D., University of Denver, 1974; Associate Professor

BRUCE P. BAKER II English, Ph.D., Texas Christian University, 1968; Professor

W. KENTON BALES (GF) Music, D.M.A., North Texas State University, 1960; Assistant Professor

ALVA BARNETT Social Work, Ph.D., University of Pittsburgh, 1981; Associate Professor

OTTO F. BAUER (GF) Communication, Ph.D., Northwestern University, 1959; Professor

DONALD BAUM Economics, Ph.D., Claremont Graduate School, 1979; Associate Professor

GORDON M. BECKER (GF) Psychology, Ph.D., University of Pittsburgh, 1955; Professor

JOSEPH V. BENAK Civil Engineering, Ph.D., University of Illinois-Urbana, 1967; Professor

ROBERT W. BENECEKE Finance, Banking and Insurance, D.B.A., University of Colorado-Boulder, 1968; Professor

KRIE E. BERG (GF) Health, Physical Education and Recreation, Ed.D., University of Missouri-Columbia, 1973; Professor

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Faculty members who are Graduate Faculty Fellows are indicated by (GF).
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60th & Dodge Streets
Omaha, Nebraska 68182

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1313 Farnam-on-the-Mall
Omaha, Nebraska 68182-0335

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2. College of Business Administration (CBA)
3. Eugene Eppley Administration Building (EAB)
4. Milo Bail Student Center (MBSC)
5. Willis A. and Janet S. Strauss Performing Arts Center (PAC)
6. Henningssen Memorial Campanile
7. University Library/Fine Arts Office
8. Durham Science Center (DSC)
10. Child Care Center (Annex 47)
11. Custodial Services (Annex 44)
14. Criminal Justice (Annex 37)
15. Goodrich Program (Annex 39)
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17. Department of Public Administration (Annex 27)
18. Public Affairs and Community Service (Annex 24)
19. Proposed Site of Fine Arts Education Center
20. Engineering Building (Engg)
   KYNO-FM, KYNE-TV
21. Sculpture/Ceramic Studio (Annex 15)
22. Central Utilities Plant (Annex 10)
23. Health, Physical Education and Recreation (HPER)
24. Fieldhouse (FH)
25. Allwine Hall (AH)
26. Pep Bowl
27. Al Caniglia Field
28. Arts and Sciences Hall (A&S)
   Air Force ROTC
29. Parking Structure

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*Alumni House